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THE PACIFIC PHARMACIST

VOL. 6

JUNE, 1912

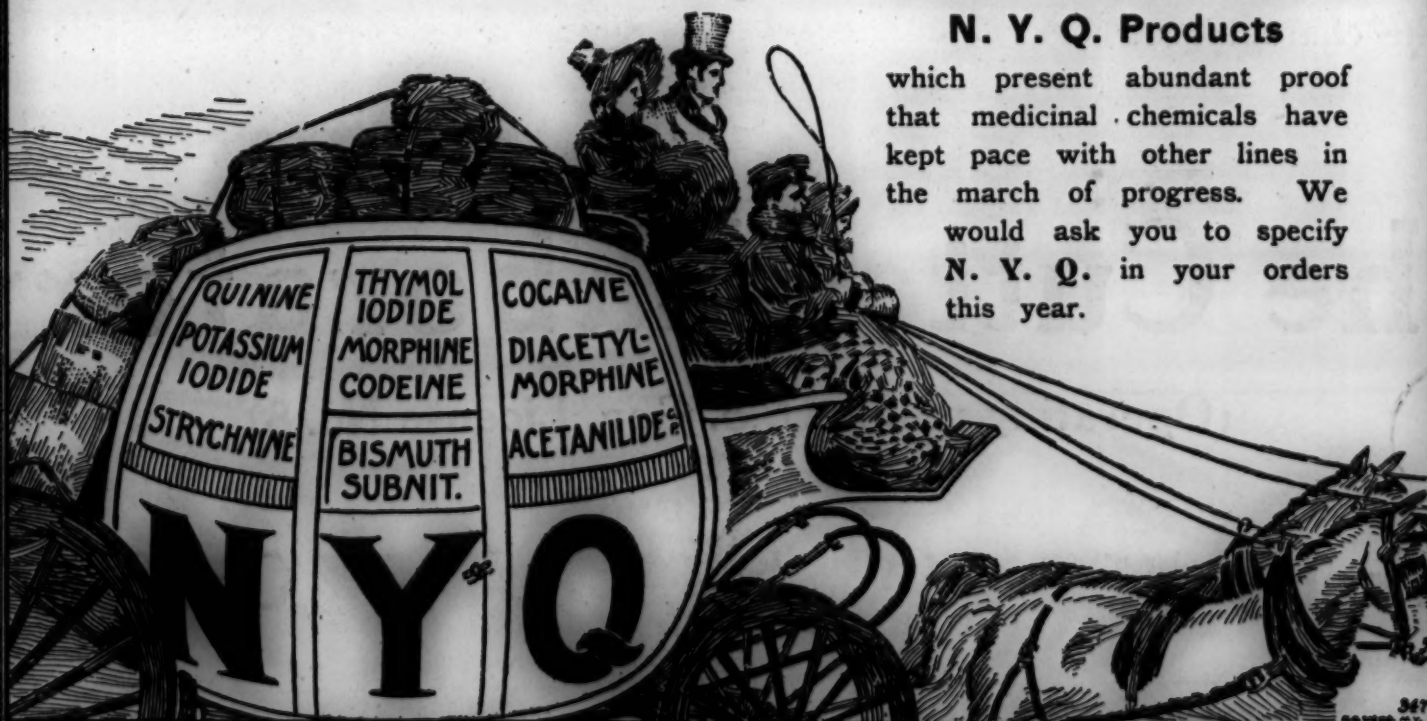
No. 2

OFFICIAL ORGAN OF THE CALIFORNIA PHARMACEUTICAL ASSOCIATION
Published by GALEN PUBLISHING COMPANY

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- "6. In no case should the wound be closed; it should be allowed to heal by granulation. The dressing and packing should be removed every day."—Ed., *J. A. M. A.*, 1909, vol. ii, page 954.

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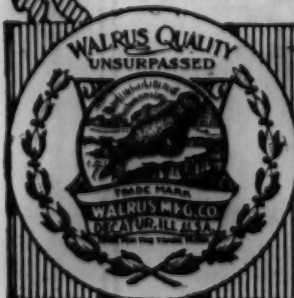
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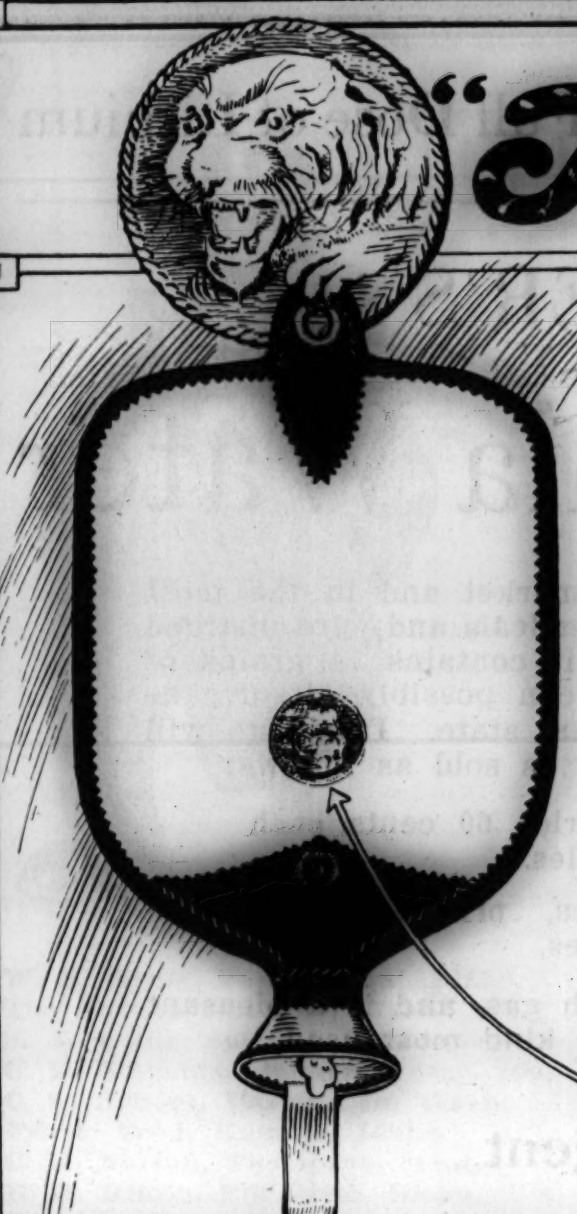
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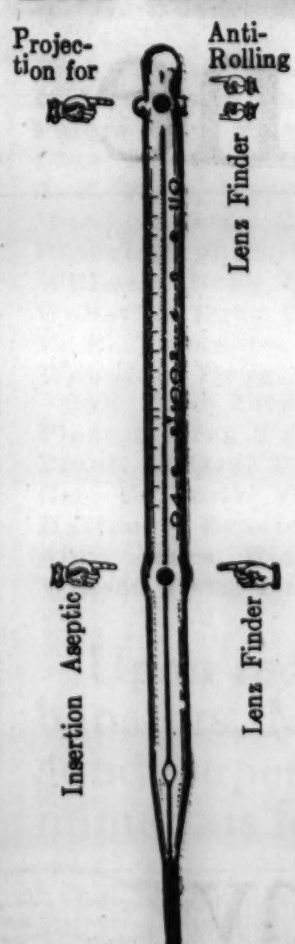
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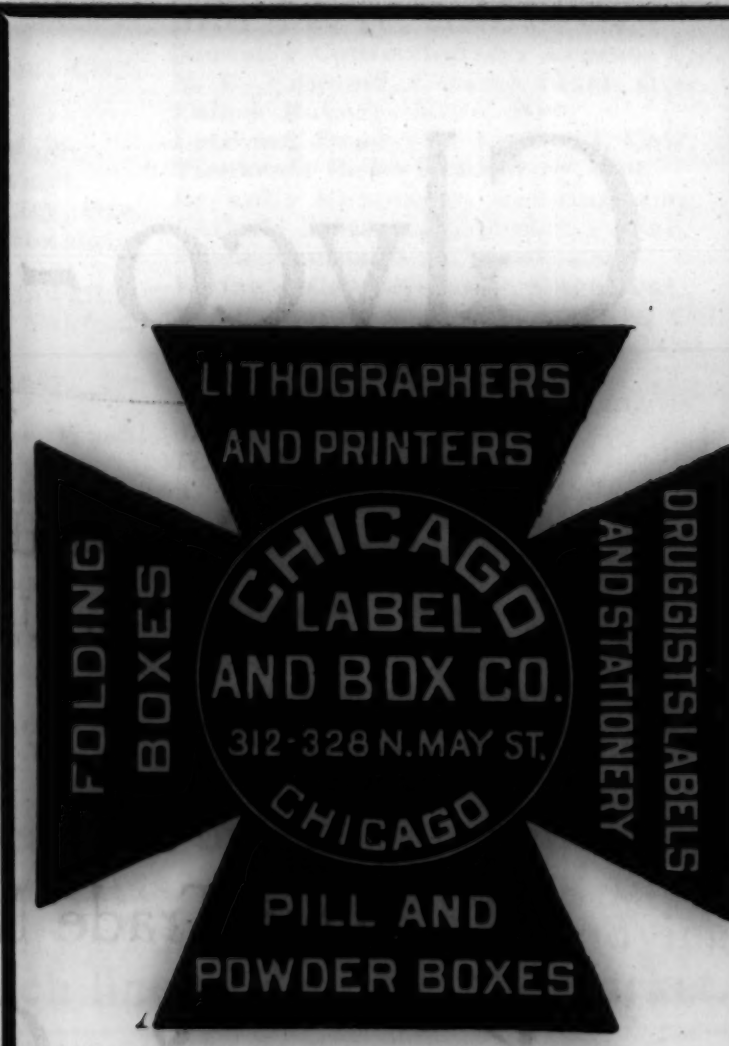
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Official Organ of the California Pharmaceutical Association and Los Angeles Retail Druggists' Association

Entered as second-class matter September 30, 1907, at the postoffice at San Francisco, California, under the Act of Congress of March 3, 1879.

Vol. 6

JUNE, 1912

No. 2

Published on the Fifteenth Day of Each Month by the GALEN PUBLISHING COMPANY on behalf of the Pharmacists and the interests of the Drug Trade

ALBERT SCHNEIDER, Editor-in-Chief

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Editorials

THE DEL MONTE MEETING

The Del Monte meeting of the California Pharmaceutical Association is now history. As at past meetings, comparatively little of any moment was accomplished. Really important measures were wholly overlooked and others of some significance were discussed gingerly and without final action, or referred to committee or to a vote by mail (referendum vote).

As we understand it, the annual sessions are intended for the congregation of members of the California Pharmaceutical Association in order that measures of importance may be presented and discussed and finally

submitted to vote. We are most decidedly in favor of leaving decisions to those in actual attendance. The voting by mail has in it a most dangerous element, that of giving the voting power to those who have not enough interest to make the effort to attend meetings and are hence in all probability not qualified to vote intelligently. There are of course possible exceptions, but as a rule the statement is in accord with fact.

We are most emphatically opposed to granting the vote by mail to those who do not care enough about pharmacy to even join the association. Let the pharmacists show their readiness to improve pharmacy by joining the

State Association, attend the annual meetings and take part in the deliberations.

**PRESIDENT
WHEELER'S
ADDRESS
BEFORE THE
C. Ph. A.**

The Address of Benjamin Ide Wheeler, President of the University of California, delivered before the Del Monte meeting of the California Pharmaceutical Association, is a powerful plea for progressive pharmacy in California. In no uncertain language President Wheeler points out the necessity of raising the educational status of pharmacists. As far as we know, this is the first time in the history of California that the president of a university has personally appeared before the pharmacists of the State and advised and urged progressive measures in pharmaceutical education with a view to making pharmacy a worthy sister or companion to the medical profession. We take great pleasure in publishing Dr. Wheeler's address in this issue, and we feel that it will be heartily approved by every progressive pharmacist in the State. At the conclusion of his address President Wheeler was granted a rising vote of thanks. We wish to take this opportunity to extend to President Wheeler the appreciation of the **Pacific Pharmacist** for his encouragement in our endeavor to raise the status of pharmacy in California.

**DUES IN THE
C. Ph. A.**

At the Del Monte meeting of the California Pharmaceutical Association it was decided to raise the annual dues from \$1.00 to \$2.50. This was done to defray the expense of issuing a full report of the meeting in pamphlet form. In our opinion this was an unnecessary change. Last year the **Pacific Pharmacist** offered to publish, and did so publish, a full report of the Sacramento meeting, including

all papers read, at no expense to the Association. The **Pacific Pharmacist** did this willingly and gladly and it was of course known to the Association that this offer of the official organ of the C. Ph. A. was a permanent one. We can see certain advantages in publishing the proceedings of the C. Ph. A. in pamphlet form, but we fear that the extra expense will result in a reduction in membership in the Association. Our membership is not nearly as large as it should be and we should, for a few years, do everything possible to encourage pharmacists to join. Raising the dues to \$2.50 will, we fear, not encourage an increase in membership.

**SUNDAY
CLOSING**

At the Del Monte meeting of the C. Ph. A., Dr. A. S. Musante presented a paper in which he made the suggestion that not all drug stores should be closed all day Sunday. There should be an opportunity for physician or patient to reach some drug store at any time. This wholly reasonable and most commendable request was voted down by the Association. It is true such emergency cases as Dr. Musante had in mind are few, but they should, nevertheless, be provided for. I am certain every pharmacist in the State can see the reasonableness of Dr. Musante's suggestion. Dr. Musante's paper appeared in the May issue.

**A REMARKABLE
U. S. COURT
DECISION**

In the recent case of the U. S. vs. J. L. Hopkins & Co. (U. S. Court, District of New York), May 30 and 31, 1912, the jury, on the charge of Judge Hand, before whom the case was tried, decided that "Senna Siftings" was the same as "Broken Senna," and that broken senna is not senna under the pure food and drugs act. The prosecution proved and the defense admitted that the article under dispute

was imported at New York as "senna siftings," and that it did contain about 25% of impurities (stems, sand, pebbles, senna pods, etc.) Subsequently said article was entered into interstate commerce as "Broken Senna U. S. P." The U. S. accordingly made out a case on two charges, namely, one of "adulteration" and one of "misbranding." Adulterated because of the 25% of foreign matter present, and misbranded because the correct label (import) "Senna Siftings" was changed to "Broken Senna U. S. P.," when said article was entered into interstate commerce. J. L. Hopkins & Co. contended that senna siftings and broken senna were the same, that the term broken senna was coined by them to apply to senna siftings, of which they imported several grades in large quantities. Judge Hand in his charge to the jury threw out the "adulteration" charge inasmuch as he considered that senna siftings and broken senna were identical and inasmuch as senna siftings did normally contain from 15 to 30% of impurities. Further, since broken senna is therefore not official (U. S. P.) it could not come under the pharmacopoeial definition and the U. S. P. label which J. L. Hopkins & Co., for some reason or other, attached to the bale of senna siftings (changed to broken senna), should not be considered.

This is certainly a remarkable decision. It is in open violation of the pure drugs act and is apparently a great victory for the misbranders.

WHAT IS A U. S. P. DRUG?

Any drug bearing the name of the United States Pharmacopoeia, whether it is the latinized pharmacopoeial name, the common U. S. P. name, the technical U. S. P. name, or any non-pharmacopoeial name in common use and commonly

applied to the U. S. P. drug, must comply with the U. S. P. requirement. Unless such article bear some correct qualifying label, indicating its deviation from the U. S. P. standard or quality, it is legally and actually a U. S. P. article. To illustrate; the words senna, senna leaflets, **Cassia acutifolia**, African senna, senna leaves, Alexandrian senna, are all lawfully and properly applicable to the U. S. P. senna obtained from Africa. These terms refer to the leaflets (exclusive of stems, pods, seeds and other foreign material) obtained from a plant botanically known as **Cassia acutifolia**.

The state of comminution of the drug has in no wise any bearing whatsoever upon the U. S. P. requirement of quality and purity of said drug. To illustrate; whole senna leaf, three-quarter senna, half senna, broken senna, sifted senna, blown senna, hand-picked senna, powdered senna, senna for percolation, senna for manufacturing purpose, etc., is U. S. P. senna. Senna with stems, senna with sand and pebbles, Aden senna, American senna, senna siftings, senna stems, senna dust, senna refuse, senna dirt, senna pods, senna with pods and seeds, are **not** senna U. S. P. and anyone selling these articles for senna or for senna U. S. P. is guilty of a misdemeanor, whether or not the judge and jury so decide. The U. S. P. declarations of the identity, quality and purity of drugs are very clear and very simple and to our certain knowledge the U. S. Department of Agriculture has been very liberal in the interpretation of the U. S. P. purity rubric.

The only way some can attract attention is by throwing mud at the higher ups.

WILEY'S SUCCESSOR Several successors to Dr. H. W. Wiley have been suggested, among these men who are well known in American pharmacy. The man to succeed Dr. Wiley should possess the following traits and qualifications:

1—He must be broadly educated. He cannot hold too many **bona fide** degrees from good universities and colleges. In educational qualifications he should rank first of all the men employed in the Bureau.

2—In addition to a broad education, he must be endowed with broad-mindedness. This is essential.

3—He must be strong-minded and not allow himself to be influenced by narrow, prejudiced or biased pleas, threats or arguments.

4—He must be unequivocally in favor of pure foods and pure drugs and must be on record as having urged purity and quality in foods and drugs.

5—He must be unequivocally opposed to the manufacture and sale of fake or objectionable foods and drugs.

6—He must have a full, concise and clear conception of the **spirit** of the pure food and drugs laws, federal and state.

7—If necessary, he must be able to juggle with the **letter** of the law in order that he may circumvent the wiles and schemes of the misbranders and adulterers and their hired attorneys. This is necessary in order that the spirit of the law may not be nullified.

8—He must be absolutely fearless in the face of all abuse and all opposition. This is very important.

9—He must not show partiality to the two divisions of the law, namely, foods and drugs. This is prevented by a broad educational requirement and broad mindedness as above stated.

10—He must have the ability and must be granted the power to develop, perfect, and simplify the methods of food and drug analyses. This is of great importance.

11—He must not exceed the spirit of the law, and he must always bear in mind that the law is primarily framed to protect the consumer.

12—He must at all times have academic freedom to express his views and to make recommendations, and he should at all times be willing to listen to the suggestions and advice of his associates and assistants.

A man with the above qualifications will never abuse his power nor his privileges and will be fair to all interests. We are unequivocally in favor of such a man and shall recommend him for the position of Chief of the Bureau of Chemistry, United States Department of Agriculture, Washington, D. C.

Wildman, Sr. (to son home from college)—Well, Richard, how have things been going with you this term?

Wildman, Jr.—Pretty slow, dad—except the cash.

Did ginger root at the Stanford game?
No, he was afraid to let Cal-cium.—**The Graduate.**

Many a man has been assaulted into success. The attacks of their enemies frequently attract attention to hitherto unknown strugglers.

Lady—I must ask you to take back that parrot I bought some time ago. He shocks all my friends with his dreadful language.

Fancier—Ah, you've got to be careful 'ow you talk before 'im. 'E's terrible quick to learn!

Keep Busy

Keep on pushing forward.

Do not sit and frown.

It takes a live fish to swim up stream—

A dead one can float down.

Original Communications

ADDRESS BEFORE THE CALIFORNIA PHARMACEUTICAL ASSOCIATION AT DEL MONTE*

Benjamin Ide Wheeler, President of the
University of California

As you see, I have my priestly robes on and the kind of service I came to perform had nothing to do with drugs, but you look so interesting and entertaining, I could not let the opportunity go by. I must speak to you.

I have just listened to the secretary's report. It is a stirring and glorious one. Evidently you do not know how important you are, otherwise this room would be full and more too. The world generally is just looking and waiting patiently for the pharmacists to get to their work. The world is more dependent on pharmacists by a good deal than it ever was. What a glorious body of ancestors you have. Think of the London Pharmacopoeia; where it came from and the long tradition that brought it to us. It came to Spain from the hands of the Moors and Arabs, who by way of that ancient tradition of chemist's lore, derived it from Greece and Asia Minor and the schools of Aesculapius and Hippocrates. You are, therefore, an ancient order, an excellent order, and in spite of what the secretary has said in his report, I know there must be in you somewhere a high pride in the noble traditions of your profession..

I know you face great danger from commercial intrusion. There is the druggist who sells celluloid combs and the druggist who is careful to deal in pure drugs. They are two persons but they have to be united in one and the same person mostly. How else is it to be in a small country drug store?

* A stenographic report.

To maintain itself it is obliged to sell celluloid combs. Then, again, we want some place to get a glass of soda. Thank the Lord for the druggist who sells a drink to keep men away from the saloons. There is no need of alcohol for a drink on hot days. It is a fact that in London the American soda fountain has been gradually eating in upon the sale of ale and stout. If you have not done any other good you have done that. So do not let us rashly decry the soda fountain. It is very difficult for you to maintain a profession with the close connections of vigorous commercial interests. All the more is it essential that you should build up your organization, tighten the bonds of your craft and re-establish the ancient self-respect of your profession.

Another thing that makes your profession hard to maintain is the intermixture of politics. I doubt that there is any one here who is connected with politics, so I will speak freely. Politics exist for stimulating public opinion to take shape at election time so that it shall set as cement does. It serves the purpose of probing up public opinion until election so that we can get the views of the people. That is what politics is for and nothing else, but when it assumes the form of permanent organization and presumes to mix with business, science, and education and exercises control of them, it is deadly.

For instance, if we should have in our schools and in our universities any touch of political influence it would make a rotten spot right where the touch was. A school will rot, a university will rot, at the point where the diseased finger of politic touches it. So with your profession. An at-

tempt to control in any way the processes for the creation of registered pharmacists represents for you the danger of the diseased finger. Beware of it. You cannot keep your profession to its right, to its honorable existence, to its own proper respect if there is any intermixture of politics connected with the raising of men to the status of registered pharmacists. This community needs good pharmacists too much to tolerate anything of that sort. If there are any men who hold any such position and can control the giving out of certificates to registered pharmacists, let us know about it.

It is to your interest to see to it that men are appointed to the Board of Pharmacy who are entirely unselfish and unpolitical in their attitude. You want for this purpose men who stand at the top of the profession. It never pays for the people to get third rate men into positions which represent them. We are sometimes tempted to get an inferior man with the idea that he will, in the long run, look out for us. He is a friend and we think we shall get something out of him if we put him in office. We always get fooled. The best men for us of the common people is the best man morally, the best man intellectually, and the suspicion which some people entertain against those who know something is a foolish and ungrounded suspicion. The American people can afford to get the very best possible man into office. Men who don't lie, men who are decent, men who know, and that is why I say it is necessary for you to have the very best men to stand at the door and control the certification of registered pharmacists. Therein is where you will build your profession.

The profession can only be constructed on a sound educational basis. What a man learns in cramming is not

of much value, he does not become a part of it and it a part of him. he merely learns it externally and forgets it afterwards. Can't you see to it that your representative men are educated in a larger and broader way than being coached for one, two or three examinations? If there is anything involved in this question of prerequisites, it is the matter of training and quality as against cramming. We are very proud of what we call "gumption." The old down-east quality of gumption, whereby a man learned, through doing things, to drive a nail, shoe a horse, or shingle a barn, but the time has gone by when we merely depend upon gumption, and men are being specially trained for those activities and the day of the amateur necessarily has passed and you have got to maintain a profession for which people are specially trained. It will do no harm if you incidentally sell wares in the drug stores, provided your man is trained for the business as being a mixer of drugs and a preparer of medicine. He will make all the better tradesman if he is trained as a druggist. Our country is advancing rapidly in specialized expert training for the various forms of social service. You have noticed that the medical profession has been radically changed in the last ten years. We insist that our physicians shall have training in the sciences fundamental to medicine. That was not thought of fifteen years ago. The old-fashioned proprietary medical school is dying out. Modern medical training is too expensive for them. A medical school, to maintain itself, has to be endowed by the community. The John Hopkins Medical School has an endowment of four million dollars. The St. Louis Medical School has raised six million dollars within the last few years, Harvard nearly the same sum, in order to adjust it to the sudden change which has come about

in medical education. It requires five or six years training and society can afford to pay for it.

I know the California College of Pharmacy is trying to move along and help you out. There are various reasons for discouragement, I have not the slightest doubt, but you cannot stand still. The interests at stake are too large.

I have said what I have to say. You will excuse me if I have spoken plainly. I have spoken because I believe in you and want you to recognize why human institutions generally believe in and desire you. You belong to an honorable profession. The time has come when this profession should rise to its place and you must answer the social demand.

I pray that the assembly may approve of it. I shall do whatever I can do to develop the interests of pharmacy. I always think when I think of your profession of the standard set in our community by Dr. Searby, whom it was my fortune to know for many years, a man who was the soul of honesty. He believed in his profession, saw dimly looking into the future what the call of the future was for it and for you, and his name and the institution he established will always be a blessing to you.

I am really very much indebted to you for allowing me to speak to you. Please remember that I speak only out of interest in you, your work, and what that work means for human society.

MEETING OF THE A. Ph. A.
AT DENVER
AUGUST 19, 1912.

ADDRESS OF PRESIDENT*

It is now near the sunset hour of the last day in the Pharmaceutical year, and here, near to that Temple of Nature, the historic Monterey Bay, have the workers of our honorable craft assembled; coming down from the mountains, from the coast, the valleys and the plains to hear the roll of the workmen called, to note the absent brothers, some of whom have been taken from among us by the ruthless hands of time, gathering as masters to take the imperfect ashlers of thought and cementing them together in harmony, unity of purpose and good will to carry on the work of building the edifice of Pharmacy begun by the great architects of the profession in the distant past.

To be an humble worker in this endeavor is, indeed, a privilege, and to be chosen to direct the work for a year is an honor that any man may well be proud of, and I assure you that it takes plenty of thought and hard work to keep up the high standard set by the men of sterling worth who have held this position in the days gone by.

It is not possible to give a complete review of all the work accomplished by this Association during the year, in an address of this character, and I shall not attempt it for I know that the committees have all worked hard and faithfully and as the results of their labors will be given in their reports, I will but mention the fact that the executive and legislative committees have ever been on the watch for good or bad legislation and have not hesitated to telegraph to our various representatives in Washington regarding the same. The untimely passing away of our friend and good counsellor, E. L. Baldwin, has left a vacant chair among us and we shall

* President Lichthardt's address before the Del Monte Meeting of the California Pharmaceutical Association, May 21, 1912.

miss him greatly for his place will be hard to fill.

The druggists throughout the State have taken a renewed interest in the affairs of the Association, and this is especially true of the brethren in the City of Los Angeles and vicinity.

It has been my good fortune to have been able to attend various meetings with members of the State Board of Health in conjunction with other pharmacists to discuss the application of the Pure Drugs Law, once in Los Angeles and other times elsewhere, and, while I must say that this Board seems to be trying to be very fair in the administration of the law, nevertheless, it is my opinion that there is but one commission that should handle all laws pertaining to Pharmacy and that is the State Board of Pharmacy.

While reading an article on modern business some time since I saw the statement made that once business was a kind of warfare wherein everybody fought for himself, but today all successful business is the result of co-operation; and is it not so? I ask you: Look around and study the lines of trade that are succeeding and you will notice that co-operation is the keystone which locks the arch and holds its members together. And how about co-operation among the druggists of this State? Are we not still adhering to the old-fashioned warfare method of business. And I am afraid that we will continue to do so until some strong captain of industry will smite the rock of self-interest and jealousy and there will gush forth a mighty stream of sustenance unknown to the pharmacist of our time.

We have a few instances which show what can be accomplished when people in the drug business get together, and, as an example I will point out the short hour system in vogue in several cities in this State.

This is a good thing, and I believe in a short day, not only for ourselves but for our help.

It is the lack of co-operation that makes us the prey of every legislative fancy our law makers see fit to impose upon us. One of the latest devices for annoyance is the Insecticide Law, originally intended for a good purpose, but through its lack of clearness imposes an unnecessary hardship upon a class of law-abiding citizens.

I trust that this Association will take such steps as it in its wisdom may seem proper to have this law changed so that it will no longer be necessary to procure an extra license to allow us to sell camphor, turpentine and so forth.

In my opinion we are now ready to take up the matter of Graduate Prerequisite and Interchange of Certificates. First, I recommend that we secure free education for young men and women who are going to make Pharmacy their life work, and it is the duty of the State of California to grant this for does not the State University give free tuition in other professional and semi-professional lines, and as this is true, why not in Pharmacy?

The recognition of the educated man in all lines of human endeavor has made enormous strides during the last few years, and we must not be blind to the fact that the public will soon demand that only the properly educated be allowed to dispense prescriptions, and while we must also take notice of the fact that not all graduates of pharmacy are properly educated, the percentage is greater than is to be found among the people who cram for a State Board examination.

It has always seemed peculiar to me that a man who is proficient enough to practice pharmacy, we will say, in the State of New York, should not be allowed to practice in Cali-

fornia, and I trust that an interchange with states having a standard equal to our own will be recommended.

The State Board of Pharmacy has certainly made a good record for themselves through their efforts in enforcing the Poison Law, and I wish to commend this body for their good work, and also say that we are proud of the fact that one of the members of this Association and a member of our Board of Pharmacy, Mr. J. H. Finger, was one of the men who represented the United States at the Opium Conference, but we have heard considerable dissatisfaction expressed as to the manner in which the Board has administered the Pharmacy Law and I hope all members of this Association, who think that they have not been treated in a fair manner by the Board of Pharmacy, will bring forward their complaints so that we can give both sides a chance to explain, for nothing is so harmful as are these "whispered complaints." We know not where they originate nor can we stop their baneful influence.

There is just one more idea that I wish to bring to your notice and that is the absolute necessity of the Pharmacists of California having representatives of our profession as members of the State Legislature. There are plenty of men who could be elected and who could do us a great service and serve the general public as well and I recommend that we try to induce at least three druggists from different parts of the State to make the effort.

I have tried to do my duty as laid down by the golden rule, and if I have failed you in any particular it was not due to lack of effort for I have in all things tried to follow the teach-

ings of the Immortal Shakespeare when he said:

"To thine own self be true,
And it must follow as night the day
Thou canst not then be false to any
man."

THE MICROSCOPICAL DETERMINATION OF AGAR IN JAMS, JELLIES AND SIMILAR FRUIT PRODUCTS

By Albert Schneider

The method generally recommended is to ash a sample of the jam or jelly at as low a temperature as possible, and to add weak hydrochloric acid for the purpose of decomposing the carbonates, etc. If agar has been added to the substance the silicious skeletons of diatoms will appear in the ash residue examined under a compound microscope.

A far better method is to dissolve about ten grams of the substance in 200 c.c. of distilled water and centrifugize for half an hour. Decant off the supernatant liquid and examine the residue microscopically. If agar has been added, characteristic agar diatoms will be found, also undissolved agar cell fragments and remnants of undissolved parasitic algal forms, which are quite universally found upon agar. The undissolved agar remnants and the algal parasites, which are in fact almost as characteristic as the diatoms, would be wholly destroyed in the ashing. Furthermore, the ashing-acid process, no matter how carefully done, results in a comminution and destruction of some of the diatom shells. The centrifugal method is, in every way, preferable. Finding one or more diatoms and one or more algal remnants in one ordinary slide mount (or in 5 to 20 fields of view) is conclusive evidence that agar has been added, though it is not possible to determine accurately the amount that is present. If the characteristic structures (diatoms and algal remnants)

are comparatively abundant then it is safe to conclude that agar has been added in considerable amount (2-4%) or that an impure grade of agar was used. The purer the grade of agar the fewer diatoms present, but no agar has yet been found on the market which is wholly free from diatoms, undissolved agar cells and algal parasites.

The reason why distilled water should be used in making the solution for centrifugalizing is because ordinary hydrant water may contain diatoms, which might be confusing, especially to a beginner, although the marine diatoms are mostly quite different in form from the fresh water diatoms. With a high speed centrifuge less material and less time need be consumed. Also, the more complete the solution the better the results.

The method is simple and so far has never failed. It is especially recommended for micro-analysts in pure food and drugs laboratories.

June 13, 1912.

NATIONAL FORMULARY

The following are some of the new formulas that have been suggested for inclusion in the forthcoming edition of the National Formulary. The committee is desirous of having them thoroughly tried by pharmacists in different sections of the country so as to avoid as much as possible unfavorable comment after the final publication of the book. Comments and criticisms based on practical experience will be welcome. All communications should be addressed to the chairman of the committee, Prof. C. Lewis Diehl, 932 Cherokee Road, Louisville, Ky., who will submit the comments to the sub-committee having the matter in charge.

Liquor Sodii Chloridi Physiologica

Physiological Sodium Chloride Solution,
Normal Saline Solution, Isotonic
Salt Solution

Sodium Chloride 8 gm.
Water, recently boiled and pre-
served in a sterile container,
a sufficient quantity to make..1000 Cc.

Dissolve the Sodium Chloride in the water, filter and again sterilize by exposure to the heat.

Aqua Phenolat

Phenolated Water. Carbolic Acid Water
Liquified Phenol 20 Cc.
Distilled Water 980 Cc.
Mix.

Liquor Pepsini Antisepticus

Antiseptic Solution of Pepsin. Physol
Pepsin 50 Gm.
Menthol 0.5 Gm.
Eucalyptol 0.5 Cc.
Oil of Betula 0.5 Cc.
Alcohol 10 Cc.
Glycerin 50 Cc.
Diluted Hydrochloric Acid..... 20 Cc.
Purified Talc. 50 Gm.
Distilled Water, a sufficient quan-
tity to make..... 1000 Cc.

Dissolve the Pepsin in 800 Cc. of dis-
tilled water, add the diluted hydrochloric
acid and glycerin. Then dissolve the
menthol, eucalyptol and oil of betula in
the alcohol, mix this liquid with the pep-
sin solution and add sufficient distilled
water to make the product measure 1000
Cc. Finally mix the purified talc with the
solution and filter, returning the first por-
tion of the filtrate until the liquid is
clear.

Liquor Picis Carbonis

Liquor Carbonis Detergens. Coal Tar
Solution

Coal Tar 200 Gm.
Quillaja in No. 20 powder..... 100 Gm.
Alcohol, a sufficient quantity to
make 1000 Cc.

Mix the coal tar and quillaja with 700
Cc. of alcohol and macerate during seven
days in a closed vessel with occasional
agitations. Then filter and wash the con-
tents of the filter with a sufficient quantity
of alcohol to make the product measure
1000 Cc.

Extractum Cinchonae Liquidum

Liquid Extract of Cinchona

Red Cinchona No. 40 powder.... 1000 Gm.
Hydrochloric Acid 30 Cc.
Glycerin 125 Cc.
Alcohol 130 Cc.
Water, a sufficient quantity to
make 1000 Cc.

Mix the hydrochloric acid and glycerin
with 5000 Cc. of water and moisten the
powder with 350 Cc. of the mixture. Pack

the moistened drug in a cylindrical percolator, pour on additional menstruum, and when the liquid begins to drop from the percolator, close the lower orifice, and, having closely covered the percolator, macerate for forty-eight hours. Then allow the percolation to proceed slowly until the cinchona is exhausted, using the remainder of the menstruum and then a sufficient quantity of the water. Reserve the first 700 Cc. of the percolate, and evaporate the remainder to 400 Cc. at a temperature not exceeding 80 degrees C., then add the reserved portion and continue the evaporation until the mixed liquid measures 800 Cc. Finally add the alcohol and sufficient water to make the finished product measure 1000 Cc.

Oleum Ricini Aromaticum

Aromatic Castor Oil

Saccharin 0.5 Gm.
Oil of Cinnamon 1.5 Gm.
Vanillin 0.1 Gm.
Cumarin 0.1 Gm.
Alcohol 40 Cc.
Castor Oil, a sufficient quantity
to make 1000 Cc.

Dissolve the oil of cinnamon, saccharin, vanillin and cumarin in the alcohol and all the castor oil and mix thoroughly.

Pilulae Digitalis, Scillae Et Hydrargyri Pills of Digitalis, Squill and Mercury. Niemeyer's Pills for Dropsy.

Guy's Pills

Digitalis, in fine powder 6.5 Gm.
Squill, in fine powder 6.5 Gm.
Mass of Mercury 6.5 Gm.

Thoroughly mix the digitalis and squill, add the mass of mercury and make into a mass by the addition of sufficient clarified honey. Divide this into 100 pills.

Pilulae Opii, Digitalis Et Quininae

Pills of Opium, Digitalis and Quinine.
Niemeyer's Pills for Phthisis

Powdered Opium 1 Gm.
Digitalis, in fine powder 6.5 Gm.
Quinine Sulphate 6.5 Gm.

Mix the ingredients thoroughly and make into a mass by the addition of sufficient clarified honey. Divide this into 100 pills.

Syrupus Papaveris

Syrup of Poppy Capsules

Poppy Capsules, deprived of seed
and in No. 20 powder 100 Gm.
Sugar 850 Gm.
Distilled Water, a sufficient quantity to make 1000 Cc.

Loosely pack the ground poppy capsules in a suitable percolator and gradually pour boiling distilled water till the drug is exhausted. Heat the percolate to boiling for two minutes, then concentrate on the water bath to 500 Cc. in which to dissolve the sugar. Add sufficient distilled water to obtain 1000 Cc. of product. Strain while warm and bottle at once. Syrup of Poppy Capsules should be kept in small vials completely filled and stored in a cool place.

Syrupus Ammonii Hypophosphitis

Syrup of Ammonium Hypophosphite

Ammonium Hypophosphite 32.5 Gm.
Diluted Hypophosphorous Acid... 2 Cc.
Distilled Water 100 Cc.
Glycerin 100 Cc.
Compound Spirit of Vanillin.... 2 Cc.
Syrup, a sufficient quantity to
make 1000 Cc.

Dissolve the ammonium hypophosphite in the distilled water, add the diluted hypophosphorous acid, filter and then add the glycerin, compound spirit of vanillin and sufficient syrup to make the product measure 1000 Cc.

Tinctura Opii Crocata

Tincture of Opium with Saffron. Sydenham's Laudanum

Granulated Opium 100 Gm.
Saffron, in No. 20 powder 25 Gm.
Saigon Cinnamon, in No. 60 powder 6 Gm.
Cloves, in No. 30 powder 5 Gm.
Diluted Alcohol, a sufficient quantity to make 1000 Cc.

Triturate the drugs in a mortar with an equal bulk of clean sand, then rub them to a smooth paste with a portion of the diluted alcohol and transfer the mixture to a percolator in which has been placed a plug of purified cotton and which is tightly stoppered. Rinse the mortar with a portion of the diluted alcohol and transfer the washings to the percolator. Add sufficient of the menstruum to leave a stratum of liquid above the drugs, cover the percolator and allow it to macerate for two days and then percolate until 1000 Cc. of Tincture is obtained.

Tinctura Cacti Grandiflori

Tincture of Cactus Grandiflorus. Tincture of Night Blooming Cereus

Cactus Grandiflorus 500 Gm.
Alcohol, a sufficient quantity to
make 1000 Cc.

Cut the cactus grandiflorus and crush it in a mortar, then add 700 Cc. of alcohol and transfer the mixture to a closed vessel and macerate for several days with occasional agitation. Express the drug, and measure the expressed liquid and set aside in a closed container. Pack the drugs firmly in a percolator and slowly percolate with alcohol until sufficient percolate is obtained to measure when added to the reserved, expressed liquid, 1000 Cc. of Tincture. Finally filter the Tincture and store it in well stoppered bottles, in a cool place.

Tinctura Cocculi Indici

Tincture of Cocculus Indicus. Tincture of Fish Berry

Cocculus Indicus, in No. 30 powder 100 Gm.
Diluted Alcohol, a sufficient quantity to make 1000 Cc.

Moisten the ground Cocculus Indicus thoroughly with sufficient diluted alcohol, pack it firmly in a cylindrical percolator and pour on enough of the menstruum to saturate the drug and leave a stratum of liquid above it. When the liquid begins to drop from the percolator, close the lower orifice, cover the percolator and macerate for six hours. Then allow the percolation to proceed slowly, adding from time to time sufficient diluted alcohol until 1000 Cc. of Tincture is obtained.

The use is almost entirely for external application to destroy vermin.

Tinctura Delphinii

Tincture of Larkspur

Larkspur Seed, in No. 30 powder 100 Gm.
Alcohol, a sufficient quantity to make 1000 Cc.

Moisten the powdered larkspur seed with a sufficient quantity of the alcohol and pack it firmly in a cylindrical percolator and pour on enough alcohol to saturate the drug and leave a stratum of liquid above it. When the liquid begins to drop from the percolator, close the lower orifice, cover the percolator and macerate for six hours. Then allow the percolation to proceed slowly until 1000 Cc. of Tincture is obtained. Rarely used internally but is commonly employed externally to destroy parasites.

Tinctura Passiflorae

Tincture of Passion Flower

Passion Flower in No. 20 powder. 200 Gm.
Diluted Alcohol, a sufficient quantity to make 1000 Cc.

Moisten the Passion Flower with a suf-

ficient quantity of diluted alcohol, pack it evenly and firmly in a conical percolator and pour on enough of the menstruum to saturate the drug and leave a stratum of liquid above it. When the liquid begins to drop from the percolator, close the lower orifice closely over the percolator and macerate for six hours. Then allow the percolation to proceed slowly, pouring on sufficient diluted alcohol from time to time until 1000 Cc. of Tincture is obtained.

Tinctura Pulsatillae

Tincture of Pulsatilla

Pulsatilla, in No. 30 powder..... 100 Gm.
Alcohol, Water, of each a sufficient quantity to make 1000 Cc.

Mix 750 Cc. of alcohol with 250 Cc. of water and moisten the pulsatilla with a sufficient quantity of this mixture, pack firmly and evenly in a conical percolator and pour on enough of the menstruum to saturate the drug and leave a stratum of liquid above it. When the liquid begins to drop from the percolator, close the lower orifice, cover the percolator and macerate for six hours. Then allow the percolation to proceed slowly, pouring on sufficient of the menstruum of alcohol three volumes, water one volume, until 1000 Cc. of Tincture is obtained.

Tinctura Sabalis Et Santali

Tincture of Saw Palmetto and Santal

Sabal, granulated or crushed in
No. 16 powder..... 200 Gm.
White Sandal Wood, in No. 60
powder 65 Gm.
Alcohol, Water, of each a sufficient quantity to make..... 1000 Cc.

Mix the Sabal and Sandal Wood and moisten the mixed drugs with a sufficient quantity of a menstruum composed of alcohol four volumes, water one volume and then pack firmly and evenly in a cylindrical percolator and pour on enough of the menstruum to saturate the drugs and leave a stratum of liquid above them. When the liquid begins to drop from the percolator close the lower orifice, cover the percolator and macerate for two days. Then allow the percolation to proceed, slowly, pouring on more of the same menstruum from time to time until 1000 Cc. of Tincture is obtained.

The following is the third installment of some of the new formulas that have been suggested for inclusion in the forthcoming edition of the National Formulary.

The committee is desirous of having them thoroughly tried by pharmacists in different sections of the country so as to avoid as much as possible unfavorable comment after the final publication of the book. Comments and criticisms based on practical experiences will be welcome. All communications should be addressed to the chairman of the committee, Prof. C. Lewis Diehl, 932 Cherokee Road, Louisville, Ky., who will submit the comments to the sub-committee having the matter in charge.

Mistura Ferri Salicylata

Salicylated Mixture of Iron. Cohen's
Salicylated Iron Mixture

Sodium Salicylate 125 Gm.
Tincture of Ferric Chloride.....125 Ce.
Ammonium Carbonate 6.5 Gm.
Citric Acid 14 Gm.
Oil of Betula 4 Ce.
Glycerin 175 Ce.
Distilled Water, a sufficient quantity to make.....1000 Ce.

Dissolve the citric acid in 200 Ce. distilled water, add the ammonium carbonate and then dissolve the sodium salicylate in this solution, add the tincture of ferric chloride, glycerin and the oil of betula, mix and then add sufficient distilled water to make 1000 Ce. and filter.

Gargarisma Guaiaci Composita

Compound Gargle of Guaiac. Cohen's
Guaiac Gargle

Ammoniated Tincture of Guaiac. 100 Ce.
Compound Tincture of Cinchona. 100 Ce.
Clarified Honey 200 Ce.
Potassium Chlorate 40 Gm.
Oil of Peppermint 2 Ce.
Distilled Water, a sufficient quantity to make.....1000 Ce.

Place the clarified honey in a bottle graduated to 1000 Ce., then gradually add the mixture of the oil of peppermint and the tinctures, shaking after each addition. Then add in divided portions with continuous shaking the solution of the potassium chlorate in 500 Ce. of warm distilled water, then add sufficient distilled water to make the mixture measure 1000 Ce.

Nebula Aromatica

Cohen's Aromatic Oil Spray. Aromatol
Phenol 2 Gm.
Menthol 2 Gm.
Thymol 1 Gm.
Camphor 3 Gm.
Benzoic Acid 3 Gm.

Eucalyptol 2 Ce.
Oil of Cinnamon 2 Ce.
Oil of Cloves 2 Ce.
Oil of Betula 5 Ce.

Liquid Petrolatum, a sufficient quantity to make.....100. Ce.
Dissolve the aromatics in the liquid petrolatum and filter.

Nebula Eucalyptolis

Eucalyptol Spray

Eucalyptol 5 Ce.
Liquid Petrolatum 95 Ce.
Mix them.

Nebula Mentholis

Menthol Spray

Menthol 2 Gm.
Liquid Petrolatum, a sufficient quantity to make.....100 Ce.
Dissolve the menthol in the liquid petrolatum by agitation in a stoppered bottle.

Nebula Mentholis Composita

Compound Menthol Spray

Menthol 1. Gm.
Camphor 1. Gm.
Oil of Betula 5 Ce.
Eucalyptol 2 Ce.
Oil of Cinnamon 2 Ce.
Liquid Petrolatum, a sufficient quantity to make.....100. Ce.
Agitate the ingredients in a stoppered bottle until solution is obtained, then filter if necessary.

Nebula Thymolis

Thymol Spray

Thymol 1. Gm.
Liquid Petrolatum, a sufficient quantity to make.....100. Ce.
Mix them.

Inunctum Mentholis

Menthol Inunction

Menthol 5 Gm.
Hydrous Wool Fat 95 Gm.
Rub up the menthol with a portion of the hydrous wool fat till a perfectly smooth mixture is obtained, then add the remainder and incorporate thoroughly.

Inunctum Mentholis Compositum

Compound Menthol Inunction

Menthol 5 Gm.
Methyl Salicylate 10 Gm.
Wool Fat 85 Gm.
Dissolve the menthol in the methyl salicylate and thoroughly incorporate the mixture with the wool fat. Compound Menthol Inunction should be kept in collapsible metal tubes, well sealed or in small tightly stoppered wide-mouth bottles.

Pasta Resorcinolis Portior, Lassar

Lassar's Stronger Resorcin Paste

Resorcinol	20 Gm.
Zinc Oxide	20 Gm.
Starch	20 Gm.
Liquid Petrolatum	40 Gm.

Thoroughly triturate the zinc oxide with sufficient of the liquid petrolatum to make a thin smooth paste. Reduce the resorcin to a very fine powder, mix it with the starch and add the mixture to the zinc oxide paste and triturate till a uniform smooth mixture is obtained, gradually adding the remainder of the liquid petrolatum and thoroughly incorporating the mixture.

Mel Rosae Cum Boracis

Honey of Rose with Borax

Borax in fine powder	10 Gm.
Glycerin	5 Gm.
Honey of Rose	85 Gm.

Mix the borax with the glycerin, then add the honey of rose and stir till dissolved.

Mel Sodii Boratis

Mel Boracis. Honey and Borax

Borax, in fine powder	10 Gm.
Glycerin	5 Gm.
Clarified Honey	85 Gm.

Mix the borax with the glycerin, then add the honey and stir till dissolved.

ARITHMETIC IN BUSINESS*

By J. Clarence Howell

Probably the majority of merchants make use of percentage in figuring profits and marking prices, but beyond that its application in its simpler form is largely for statistical purposes.

It seems to be true that the average person is unable to cope with the ordinary problem in percentage if it goes beyond one operation.

Failure to couple the rate with its base leads to many very common errors. The problem which follows will illustrate my meaning:

"An article costing \$50.00 was marked to sell at 40% above cost. If a discount of 40% was afterward allowed, was there a gain or loss, and how much?"

Give this problem to almost any

* From The American Penman.

group of people, with the possible exception of a few merchants making frequent discounts, and half your people will immediately say that there is neither a gain nor a loss. Of the remainder who may suspect that some change has taken place, few will be able to say off-hand that there has been a loss.

This is due almost wholly to the failure to grasp the idea that the rate of per cent represents a fractional part of the base, and that in problems such as the one just given, there are two distinct bases, the second being 40% greater than the first, and that, therefore, the second percentage will be 40% greater than the first, thus making the discount 40%, or 16% of the original cost.

It is necessary to get the idea that there is no equality between rates of per cent unless their bases are equal and furthermore, that no comparison can be made between them until they have been reduced to terms of the same unit value or to per cents of the same base.

The mention of any number of per cent is meaningless unless we couple with it a specification of our basis of computation.

Of course, custom has given meaning to many expressions, but custom may also change the meaning; and, with the present apparent need, on the part of many lines of business, to keep the public in the dark as to profits and other data, the opportunity offered by incomplete expressions is most inviting.

In view of the different constructions to be placed upon them, I believe that questions similar to the following should be eliminated from our business arithmetic. Instead of "What is the per cent of gain?" we should have "The gain is what per cent of the cost?" or "What per cent of the sell-

ing price is profit?" depending upon which we mean.

The following may make clearer my grounds for the attitude taken in this matter. In the window of the Burroughs Adding Machine Company's local agency is a card which reads as follows:

A Puzzle

An article cost \$1.00 to manufacture.

The expenses of selling are 22%.

For what must it sell to make a net profit of 10%?

Nine out of ten men can't solve it. Can you?

Practically every business arithmetic on the market, if offering such a problem, would give as a result \$1.32, taking the first cost as the basis for estimating cost of sales and net profit.

My first thought, on reading it, was that the author would probably give as a result \$1.34, since he had called it a puzzle, thus figuring a profit on cost of selling.

Imagine my surprise, then, upon being informed that the result is \$1.47, the author insisting that the expenses of selling and the cost should be quoted on the basis of the selling price.

He maintained that many failures in business were due to the practice of basing desired profits on cost.

Local business men were attracted by this question and began to discuss it and we learned that it is the custom of several large business houses in this city (and the same is probably true in other cities) to reduce their profits and cost of selling to a percentage basis, with the selling price as the base.

This only gives added proof that the art of applying arithmetic to business requires more study and discrimination than does the science itself, and this all goes to show that there is yet truth in the old saying, "A fool can ask questions (in arithmetic as well as elsewhere) that a wise

man (say nothing about a child) can't answer."

NATIONAL FORMULARY

The following is the fifth installment of some of the new formulas that have been suggested for inclusion in the forthcoming edition of the National Formulary. The Committee is desirous of having them thoroughly tried by pharmacists in different sections of the country so as to avoid as much as possible unfavorable comment after the final publication of the book. Comments and criticisms based on practical experiences will be welcome. All communications should be addressed to the Chairman of the Committee, Prof. C. Lewis Diehl, 932 Cherokee Road, Louisville, Ky., who will submit the comments to the sub-committee having the matter in charge.

FLUIDEXTRACTUM BAPTISIAE

Fluidextract of Baptisia

Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Alcohol, 3 volumes; water, 1 volume.

FLUIDEXTRACTUM CHIONANTHI

Fluidextract of Chionanthus

Process A (see N. F. III. p. 56) No. 40 powder.

FLUIDEXTRACTUM COCILLANAE

Fluidextract of Cocillana

Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Alcohol, 3 volumes; water, 1 volume.

FLUIDEXTRACTUM CONDURANGO

Fluidextract of Condurango

Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Dilute alcohol.

FLUIDEXTRACTUM DIOSCOREAE

Fluidextract of Dioscorea

Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Alcohol, 4 volumes; water, 1 volume.

FLUIDEXTRACTUM DROSERAE

Fluidextract of Drosera

Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Alcohol, 2 volumes; water, 1 volume.

FLUIDEXTRACTUM ECHINACEAE

Fluidextract of Echinacea

Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Alcohol, 4 volumes; water, 1 volume.

FLUIDEXTRACTUM EUPHORBIAE PILULIFERAE

Fluidextract of Euphorbia Pilulifera
Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Diluted alcohol.

FLUIDEXTRACTUM HELIONIATIS

Fluidextract of Helonias
Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Diluted alcohol.

FLUIDEXTRACTUM NAPETAE

Fluidextract of Napeta
Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Alcohol, 3 volumes; water, 4 volumes.

FLUIDEXTRACTUM RHAMNI CATHARTICI

Fluidextractum Rhamnus Catharticus
Reserve the first 750 Cc. and then proceed as in Process A (see N. F. III. p. 56) No. 40 powder. Menstruum: Diluted alcohol.

FLUIDEXTRACTUM SENECTIONIS

Fluidextract of Senecio
Process A (see N. F. III. p. 56) No. 30 powder. Menstruum: Alcohol, 2 volumes; water, 1 volume.

FLUIDEXTRACTUM TRIFOLIUM

Fluidextract of Trifolium
Reserve the first 800 Cc. and then proceed as in Process A (see N. F. III. p. 56) No. 30 powder. Menstruum: Diluted alcohol.

FLUIDGLYCERATES

Fluidglycerates are intended to be of the same strength as fluidextracts. They contain approximately 50 per cent. by volume of glycerin and no alcohol. The drug should be in a No. 20 or 30 powder unless otherwise directed. For drugs that do not require either acid or alkaline menstruum they may be prepared by the following outlined process:

General Process

Drug, in coarse powder.....1000 Gm.
Glycerin 500 Cc.
Water 1500 Cc.
Chloroform Water, a sufficient quantity to make 1000 Cc.

Mix the glycerin and water and moisten the drug thoroughly with a portion of the mixture, then **pack it very lightly** in a cylindrical percolator, and add enough of the menstruum to saturate the powder and leave a stratum above it. When the liquid begins to drop from the per-

colator, close the lower orifice, and having closely covered the percolator, macerate for 48 hours. Then allow the percolation to proceed until the drug is exhausted using first the remainder of the menstruum and afterwards chloroform water. Reserve the first 500 Cc. of percolate and evaporate the remainder on a water bath, the weaker portion first, then the stronger until it is reduced to 600 Cc., then add the reserved portion and continue the evaporation until the product measures 1000 Cc. Allow the preparation to stand for a few days, then decant the clear portion and strain the remainder.

FLUIDGLYCERATUM GLYCYRRHIZAE

Fluidglycerate of Glycyrrhiza—Fluidglycerate of Licorice

Glycyrrhiza, Russian, in No. 20 powder 1000 Gm.
Ammonia Water 60 Cc.

Mix the ammonia water with 600 Cc. of the glycerin water menstruum, moisten the ground drug with the mixture and complete the preparation by following the general process for fluidglycerates, excepting that the mixed percolates are to be evaporated to 990 Cc. and the remaining 10 Cc. ammonia water added to the cold product.

FLUIDGLYCERATUM KRAMERIAE

Fluidglycerate of Krameria
Krameria, in No. 20 powder....1000 Gm.
To make 1000 Cc.

Follow the general process for fluidglycerates, using 600 Cc. of menstruum to moisten the ground drug.

FLUIDGLYCERATUM RHAMNI PURSHIANAE

Fluidglycerate of Cascara Sagrada
Cascara Sagrada, in No. 20 powder 1000 Gm.
To make 1000 Cc.

Follow the general process for fluidglycerates, using 500 Cc. of menstruum to moisten the ground drug.

FLUIDGLYCERATUM RHAMNI PURSHIANAE AROMATICUM

Aromatic Fluidglycerate of Cascara Sagrada
Cascara Sagrada, in No. 20 pow-

der 750 Gm.
 Fluidglycerate of Glycyrrhiza ... 250 Cc.
 Lime 38 Gm.
 Glycerin 375 Cc.
 Water 2625 Cc.
 Oil of Fennel 1 Cc.
 Oil of Cloves 1 Cc.
 Oil of Cassia 1 Cc.
 Chloroform Water, a sufficient
 quantity to make 1000 Cc.

Mix the lime with 1500 Cc. of water and stir in the cascara sagrada, moistening the drug evenly and thoroughly. Dry the moist powder by exposure to a moderate heat until air-dry. Mix the glycerin with 1125 Cc. of water and moisten the cascara sagrada with 600 Cc. of this menstruum, **pack it lightly** in a cylindrical percolator and add enough of the menstruum to saturate the powder and leave a stratum above it. When the liquid begins to drop from the percolator, close the lower orifice, and having covered the percolator macerate the mixture for 48 hours. Then allow the percolation to proceed slowly until the drug is **exhausted**, using first the remainder of the menstruum and afterwards chloroform water. Reserve the first 375 Cc. of the percolate and evaporate the remainder on a water bath, the weaker portion first, then the stronger, until it is reduced to 450 Cc., then add the reserved portion and continue the evaporation until the liquid measures 747 Cc. When cold add the fluidglycerate and volatile oils and mix thoroughly. Allow the preparation to stand for a few days, then decant the clear portion and strain the remainder.

FLUIDGLYCERATUM RHEI

Fluidglycerate of Rhubarb

Rhubarb, in No. 30 powder.....1000 Gm.
 To make 1000 Cc.

Follow the general process for fluidglycerates, using 500 Cc. of menstruum to moisten the ground drug.

SYRUPUS IODOTANNICUS

Syrup of Iodo-tannin

Iodine 2.7 Gm.

Tannic Acid 5.4 Gm.
 Sugar 800.0 Gm.
 Distilled Water, a sufficient quantity to make 1000.0 Cc.

Reduce the iodine to a powder and introduce it into a flash with the tannic acid and 450 Cc. of distilled water and then heat the mixture on a water bath, at a temperature not exceeding 50 deg. C., agitating the flash from time to time until a drop of the liquid ceases to give a blue coloration with starch T. S. Then add the sugar and when this is dissolved remove the flash from the water bath, allow the syrup to cool and finally add enough distilled water to make the product measure 1000 Cc.

Hegeman-Riker Merger a Fact

The much talked of chain store trust was put through at Albany, New York, February 8, when the Hegeman-Riker Company of New York City was incorporated with a capital of \$15,000,000.

The merger starts with about sixty stores in New York and Boston and plans to open others soon in Philadelphia, Baltimore and other cities. It is generally believed that the promoters expect to extend their chain of stores gradually to all the large cities of the country.

The original plan fathered by Louis K. Liggett included the Rexall and Liggett retail stores, numbering now over forty, and the dropping of the litigation between Liggett and the Riker Company over the exclusive right of the latter to sell Rexall preparations in Greater New York and Boston, and allowing Liggett to establish Rexall stores in both cities, indicates that some basis of agreement has been reached that may eventually unite the Rexall-Liggett stores with the Hegeman-Riker chain. The Owl stores of the Pacific Coast seem to be under the control of Liggett, as they handle the Rexall line, and Liggett recently attended the meeting of the managers of the Owl Company at San Francisco.

All the signs point to a formidable combination for the control of the retail drug business in the large cities of the country and eventually in the entire country if the merger proves profitable in its earlier stages.

Scientific and Pharmaceutical Notes

ARE CARBONATED BEVERAGES BACTERICIDAL?

There is a popular tradition that highly carbonated beverages (exclusive of fermented drinks) are bactericidal or free from bacteria. We do not know of any systematic investigations to prove or disprove this popular belief. The limited observations made by the writer would tend to show that carbonated mineral waters are freer from bacteria than those which are not carbonated. We should be pleased to hear from bacteriologists that may have given this matter some attention. Does carbonic acid gas in solution have marked bactericidal properties?

THE DOCTOR AND THE DRUGGIST

Before complaining of the degeneracy of modern times it is often well to turn to the past and see what the conditions were then. The "good old times" always seem good because it is a fortunate trait of mankind to remember pleasant things and to forget the attending disagreeable events. So it is with the ever present complaint that the doctor is taking the druggist's business by dispensing his own medicines and that the druggist encroaches upon the doctor's rights by counter prescribing; never were the two branches of the profession more thoroughly divorced in practice than today, and while there are no doubt many conditions that could be bettered, the hopeful sign is that both doctors and druggists are working hand in hand to better them.

Within the memory of men still living it was a common practice for physicians to maintain a dispensary in which their prescriptions were compounded by young assistants for their patients; in fact, it was part of the education of a medical student studying under a preceptor to manufacture galenicals and compound the prescriptions used and ordered by him. Quoting from the diary of a Doctor Schoepfer, a Hessian physician who visited Philadelphia in 1783, during the Rev-

olutionary War, we find the condition then existing set forth as follows:

The yearly take in of most of the physicians of good practice is reckoned at several thousand pounds, Pennsylvania currency. But their largest profits arise from the private dispensing of remedies, to which end each physician of large practice has a select stock of drugs and keeps a few young men apprentices) at hand to prepare prescriptions and assist in visiting patients.

Doctor Toner, in his *Annals of Medical Progress*, says:

Doctor John Morgan, of Philadelphia (in 165), was the first American physician to advocate and adopt the theory that medical men should confine themselves to prescribing remedies, leaving the compounding of these to the trained apothecary. This system was gradually adopted in the large cities and towns, although from necessity its adoption in country districts was slow. The division of medicine and pharmacy became an established practice in Great Britain in 1750. In 1754 the College of Physicians and Surgeons passed an act prohibiting their members and licentiates from taking upon themselves the duties of the apothecary, and in 1765 issued an order against the pursuit of specialities.

Up to a much later date we find that in this country as well as in England the practice of pharmacy was considered as part of the professional work of the physician. So common indeed was this in England that in much of the literature of the early Victorian age we find references to physicians who were apothecaries and to apothecaries who reaped handsome rewards from practicing the healing art. Thus Thackeray, in *Vanity Fair*, the scenes of which are laid in the early part of the last century, speaks of Mr. Clump, Miss Crawley's apothecary, and Dr. Squills, her physician, and states that both consulted (over a bottle of wine) as to the young lady's condition. Mrs. Bute Crawley complains that the apothecary did not tell her earlier of her daughter's serious condition, thus illustrating how in those days the apothecary was often the first to be consulted, as is common even to this day.

The scenes of *Pendennis* are laid at a later period, but still we find that the apothecary and doctor were almost one and the same. John Pendennis, the father of the hero, was apprenticed to an apothecary in Bath and later opened a shop of his own, wherein the foundations of his fortune were made by a lucky accident, Lady Ribstone's drunken chairman dumping both the lady and the chair through the window of the shop one day, "smashing the handsomest pink

bottle in the window." Pendennis hastened to her aid with "cinnamon and sal volatile," and so successful was he in both calming the lady's feelings and winning her esteem that she at once established him as her physician. The result of this happy accident was that Mr. Pendennis, the apothecary, acquired a large and lucrative practice among the nobility and gentry.

Thackeray makes other references to the dual role of surgeon and apothecary, but we must turn to Dickens's immortal *Pickwick Papers* for a still more illuminative description of conditions. We read that Mr. Winkle was attracted by "a newly painted shop over which hung a red lamp, which would have announced the residence of a medical practitioner even if without the words 'Surgery' in golden characters." This was the office, shop and abode of Bob Sawyer, a character who, being an old friend of Mr. Winkle, enlightens him as to his methods of building up a practice. He sends his boy out to leave various boxes, bottles, pills and plasters at nearby houses: "Master reads the labels, 'Draught to be taken at bedtime—pills as before—lotion as usual—the powder.' From Sawyer's, late Nockemorf, prescriptions carefully prepared." Later the boy rushes up to the house and asks for the medicines left, saying that he had made a mistake, they were for Lord B. "Result," remarks Sawyer, "I give them the impression of being busy, that makes them think it's so, then they come to me."—*American Druggist*.

Struggling Author—This world will not recognize all I have done until after my death.

Friend (consolingly)—Well, I wouldn't worry. You'll be beyond injury then.—**Satire.**

A farmer boy and his best girl were seated in a buggy one evening in town, watching the people pass. Near by was a popcorn-vender's stand.

Presently the lady remarked: "My! that popcorn smells good!"

"That's right," said the gallant. "I'll drive up a little closer so you can smell it better."—**Everybody's Magazine.**

"So the bank teller has disappeared. Was he short in his cash?"

"No, he was ahead. It was the bank that was short."—**Boston Transcript.**

No Filth, No Flies

"Swat-the-fly" campaigns for 1912 are well on. The elimination of this filthy and dangerous insect is a desirable end. As we have observed already, the housefly, in addition to being a demonstrated agent in the spreading of typhoid, is strongly suspected, on more or less conclusive evidence, with relation to a large number of infections, including cholera, dysentery, the infantile diarrheas, diphtheria and contagious ophthalmia. In an excellent paper, Stockbridge remarks that about a billion flies were killed in various campaigns of 1911—a statement which seems impressive until one considers the number of flies which escape the slaughter. In Washington, D. C., alone, some 7,000,000 were killed by the "swat," the trap, drowning, sulphur fumes and even by electrocution. Dr. Howard, of the Bureau of Entomology, points out that in the congenial climate of that city seven generations of flies may be produced in a single summer. One female fly will lay on an average a batch of 120 eggs; and if all these eggs from a batch laid in the middle of April should hatch and reproduce their kind in like manner, there would be by autumn, from a single female fly, a progeny of nearly six thousand billion. And as each female may lay four batches of eggs, the figures for their unchecked development through a summer stagger the imagination. To "swat the fly" by the billion, therefore, means little so long as those that survive have unchecked opportunity for breeding. There is even more weight, therefore, in Stockbridge's statement that during 1911 filthy breedingplaces were cleaned up, which, if left alone, would have given opportunity for the propagation of incalculable billions. Better than "swatting" the fly is the prevention of its breeding by cleaning up the places where it thrives—the insanitary privy, the dead dog and horse allowed to lie unburied until putrid, the dung-heap, the uncovered garbage can and the spittoon. Some of the methods by which such insanitary conditions may be eliminated, or at least minimized, were mentioned some time ago. Descriptions of the details are freely provided by the health departments of many states and municipalities, and by civic leagues and like organizations—**Journ. Am. Med. Assn.**

The Soda Fountain

Did you ever stop to think why it is that some soda fountains are more frequently patronized, both by grown folks and by the younger ones, than others? There are of course a good many reasons, but one in particular is frequently overlooked, and that is, "Do you treat the children right?"

Business is business, and any money honestly made helps to swell the net profits. The children in many places are neglected entirely and this is a big mistake. As the clerk of today is the proprietor of tomorrow, so the child of today is the man or woman of tomorrow.

Win the Children

This story is known to us all, but few of us appreciate it at its full value. Such habits of trading as are formed early in life become firmly fixed habits, and are more permanent in their character than possibly any habits formed in later years. The reason that so few of us appreciate this condition is that we are content to plan for today, some possibly for tomorrow, but how few druggists have the business acumen or strategy to plan five, ten or even fifteen years ahead.

They plod along from day to day, from week to week and from month to month, without any very serious thought, and the result is that in five or ten years they are practically where they are today. They have been standing still in a business sense, and other more active merchants in other fields have been allowed to undermine the druggist's foundation.

Like Child, Like Father

The druggist who wins the children, either at the fountain or elsewhere, has insured his future. He who wins the children is bound to win their parents, and naturally this is followed in winning whole family circles. The child can appreciate quality goods and first-class service, and if the man's heart is in the right place, that same child is his best advance agent of publicity and prosperity.

It is the child (or the "kid" if you prefer) who does the suggesting; it is he who says: "Let's go to Blank's for a soda," etc.; and it is he who leads his parents to his or her own favorite place; the rest is then up to the druggist. Be sincere and

patient with the child, avoid slovenliness and unnecessary delay, and do not slight the child in any manner, for it is keenly felt, generally resented, and seldom if ever forgotten.

Mixing and Serving Crushed Fruits

The mixing of crushed fruits with syrup to a proper dilution is important and needs more attention than it generally receives. Either too little or too much of one or the other is harmful. The following general formula yields satisfactory results and is applicable to nearly all fruits:

Crushed Fruit	1 part
Syrup of the same fruit.....	1 part
Plain Syrup	1 part

Mix well in bowl and it is ready to serve. Even this general formula may be deviated from, if experience and study has proven that a change is desirable.

A Chocolate-Strawberry Sundae

Chocolate Syrup.....	1 oz
Ice Cream	2½ oz.
Crushed Strawberries.....	1 oz.
Cream, whipped	q. s.

The chocolate syrup is placed in the sundae dish, then a disher full of ice cream is added and on top of this is placed a small ladleful of crushed strawberries; finally the whole is decorated or "topped off" with whipped cream..

Malted Milk Special With Egg

One of the most nourishing, appetizing and satisfying beverages is made as follows:

Into a heavy mixing glass draw one and one-half ounces of chocolate syrup, and break into it one whole egg; then add one ounce of ice cream, a tablespoonful of malted milk, two ounces of plain water and a suitable amount of cracked or shaved ice. Then shake thoroughly and pour back and forth twice, finally straining from the shaker into a large soda glass, filling the latter with the fine stream, and serve. Pretty hard to beat.—N. A. R. D. Notes.

Assistant—Mr. Grumbly writes: "I don't see how you can have the nerve to sell your worthless remedy at fifty cents a bottle."

Manager—Well, strike out "have nerve to" and "worthless," and put the letter in our testimonials.

The News Bureau of the Pacific Pharmacist

NOTES ON THE DEL MONTE MEETING OF THE C. Ph. A.

This was the fifth annual meeting of the California Pharmaceutical Association. The attendance was small but there was no lacking in enthusiasm and in pharmaceutical activity. The entertainment provided was in no wise permitted to interfere with business. President Lichthardt's address was brief and to the point and as it appears in full on another page of this issue we shall pass it by with this mere mention. Mr. Munson of San Jose was in evidence favoring higher pharmaceutical education and of course met with the usual opposition.

Mr. Finger read a very exhaustive paper on "The Hague Opium Conference." This paper will appear later. The membership committee reported 620 members—150 of whom were found delinquent and dropped for non-payment of dues.

Dr. H. M. Whelpley of St. Louis, was placed on the roll of honorary members. In the absence of R. E. White, his paper on "Early Pharmaceutical Education in Great Britain and Ireland," was read by Mrs. White.

Mrs. Philip presented an ably written paper on "An Argument for the College Prerequisite."

At the third session Dr. John Zeig, of Park-Davis Co., gave a lecture on "Commercial Prospects for Biologies." He illustrated with lantern slides the manufacture of Diptheritic Antitoxin, also the method of testing and standardizing antitoxins and other sera.

Prof. Woodworth of the Department of Entomology of the University of California gave a digest of the insecticide law. He stated that his de-

partment was willing to aid the druggists in any manner possible to relieve them of the vexations incidental to the present reading, provided the letter of the law were not in any manner nullified.

Dr. John Herb read an interesting paper in which were set forth the inefficiencies of the so-called extracts of cod liver oil. The paper was suggested for the cup offered by the President for the best original work by a non-graduate. Dr. Herb being a graduate was not eligible, so the cup is still without a claimant.

Prof. Green spoke on "Weights and Measures."

Mr. C. K. Smith read a paper on "Women in Pharmacy." Mr. Ansley read a paper on "Fire Insurance for Druggists." These papers will be published in the **Pacific Pharmacist**.

The third and last day, May 23rd, had the best attendance. An unfavorable opinion was rendered on the communication from the National Association of Pharmacologists regarding the interchange of certificates.

Mr. Finger promised to attend to the matter of the daily press printing the nature and amount of poison used by suicides and homicides.

A majority report favored the referendum vote by mail as outlined by President Lichthardt in his opening address. H. J. Finger submitted a minority report recommending that every pharmacist in the State be given a right to vote on the pharmacy law, poison law and the pure food law.

The majority of the committee composed of Chairman Bruce Philip and J. A. Sanford were of the opinion that only members of the association should have the right to vote. H. J. Finger contended that the laws

were of such importance to every pharmacist in the State that the Association should not take action in recommending new laws unless consulting every registered pharmacist.

1912-1913 OFFICERS OF THE C. Ph. A.

The following officers of the California Pharmaceutical Association were elected at the Del Monte meeting: Edward Baer, San Francisco, President; J. A. Sanford, Stockton, first Vice-President; Frank T. Green, San Francisco, second Vice-President; K. B. Bowerman, San Francisco, Secretary and Treasurer.

The next annual meeting will be held at San Jose, Cal.

W. P. A. P. C.

The Women's Pharmaceutical Association of the Pacific Coast held a meeting at Del Monte and re-elected Dr. Josephine Barbat-Winslow, president. They also had a luncheon, which they designated as a Love Feast Luncheon, to promote harmony and progress among the women pharmacists of the Pacific Coast.

Miss Clarissa M. Roehr was appointed a delegate from the W. P. A. P. C. to attend the Denver meeting of the American Pharmaceutical Association in August.

THE LADIES' AUXILIARY OF THE C. Ph. A.

The Ladies' Auxiliary of the California Pharmaceutical Association held its annual meeting at Del Monte, and reported considerable progress during the past year, although the movement had not advanced all over the state as much as had been hoped. Plans were laid for a very active campaign during the next year.

The following officers were elected: President, Mrs. Fletcher Howard, Los Angeles; first Vice-President, Mrs. C. H. Ward, Pasadena; second Vice-Presi-

dent, Mrs. E. G. Binz, Los Angeles; Secretary, Mrs. N. Schwartz, San Francisco; Treasurer, Mrs. S. A. McDonnell, San Francisco. Local secretaries were appointed to carry on the work in the various counties of the State.

THE GRADUATE

THE GRADUATE has been issued from the press. It is the initial issue of the Senior Annual of the California College of Pharmacy. We were greatly interested in this publication and we frankly admit that based upon certain experiences with work of the class represented by The Graduate, we had some slight misgivings as to the success of the venture. We are now in position to state that the undertaking has been a success in every way. The student body of the California College of Pharmacy is to be congratulated for having accomplished this work. We wish to compliment especially Mr. Clifton P. Rose, the Editor-in-Chief, and Mr. J. George Moore, Business Manager, for the very creditable work done. We, however, have no intention of in any way minimizing the work of the associates.

The makeup of the volume is excellent. The half tones and the reproductions from original drawings by the art staff, leave nothing to be desired. Paper, print and binding are excellent.

Aside from its merits as a product of the book lover's art, The Graduate performs a very important mission. It is a means of binding the fellowship of the class members and creating a more lasting interest in the Alma Mater and all that that represents. The Graduate is so to speak an index to pharmaceutical progress in California as comprehended and promulgated by the graduates of the California College of Pharmacy. This is clearly set forth in the editorials and

in the article on "The College Graduation Prerequisite."

In conclusion we will mention only a few of the special features of The Graduate. The joshes are mostly good and sufficiently lucid to be comprehended by even an Englishman, which is saying a great deal. Under the Literary section we find a short story by S. A. Hjelte, '13, entitled "Sepulchra Osiri," which shows very unusual literary ability. The story assures the author a brilliant future in literature, if not in pharmacy. We wish, again, to express our appreciation of the attitude taken by the class of 1912, as represented by The Graduate, with regard to better qualified pharmacists and higher pharmaceutical education and this in spite of considerable opposition on the part of certain druggists, and others, in California. The business manager is to be especially complimented on the neat, clean and ethical advertisements found in its pages. The Graduate has made a most attractive initial appearance and its future success is practically established.

GUSTAV LUDWIG RAMSPERGER

Dr. Ramsperger, one of the best known members of the American Pharmaceutical Association, and active in pharmaceutical affairs in New York and director of the New York College of Pharmacy, died on the 6th day of May. A glowing eulogy of the man and his work was presented at a meeting of the faculty, directors and friends of the New York College of Pharmacy, by his friend and intimate associate, Dr. W. C. Alpers. Others present spoke of the many noble qualities of Dr. Ramsperger and the great work he performed in the interests of pharmacy.

Tips for the Soda Clerk.

Give the man what he thinks he wants; don't try to convince him that what you

have served is it. You may be right, but he has the money.

Remember the story of the man who ran to get across the street ahead of the electric car, and then turned around and watched the car go by and disappear; he was in no hurry, but he just simply had to beat that car. The same man may sit on the stool five minutes after finishing his drink and receiving his check but if he had to wait half a minute for the check, he would be almost ready to throw a fit. Humor him; he helps to pay salaries.

Hunger is the best sauce for a meat dinner, and pleasing manners behind the counter lend an agreeable flavor to all fountain confections.

Syrup is one of the most expensive articles used at the fountain—especially now that sugar is chasing the beef that has got nearly as high as the moon—and it is one of the most wasted, the average drink dispensed being too sweet.

Once a soda clerk put his fingers on the rim of the glass in serving a customer. The judge gave him ninety days, and they all said he got off easy.

Every drink served at the fountain should be "custom" made and "custom" served, and not dished out by the dozen. Those who need a diagram for this chip of wisdom would not be helped by it.

A few paper napkins kept within easy reach about the soda counter come in handy on many occasions.

Serve every customer as if he were a new one and you wished to make him come back.—Exchange.

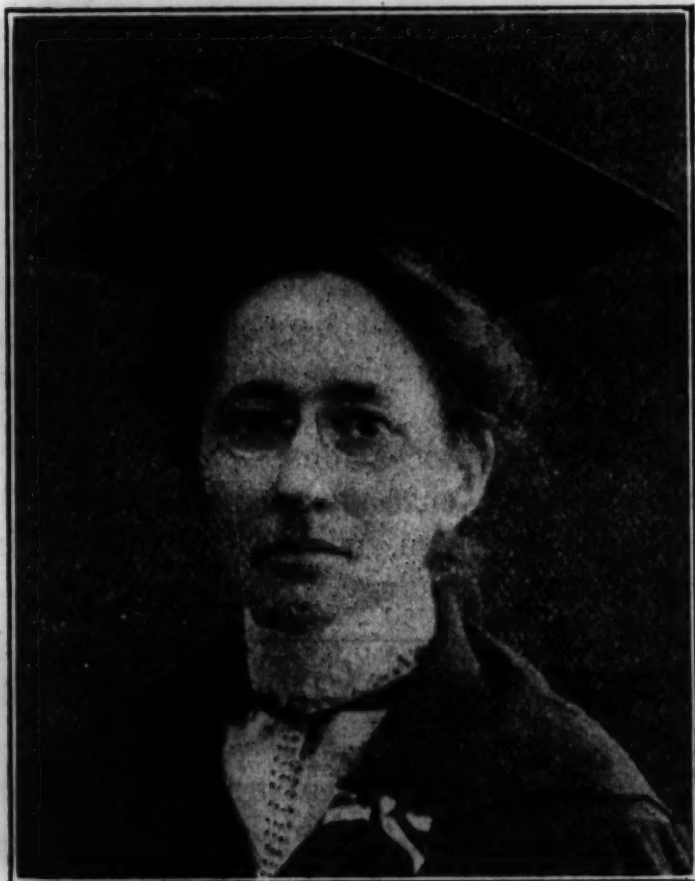
A FEW MORE PROMINENT MEMBERS OF THE W. P. A. P. C.

The Womans' Pharmaceutical Association of the Pacific Coast has established a name for itself throughout the United States and the good example set by this association is being followed by other women pharmacists. The latest association of women pharmacists was formed in New York City. A plan of uniting these several associations into a national body is being considered.

Mrs. Bruce Philip, nee Fayette Harris, entered the California College of Pharmacy in the year 1899, graduating in 1901 after the usual course. Her

practical experience was commenced in the wholesale house of Messrs. Langley & Michaels, followed by relief work in several drug stores in San Francisco. After becoming a registered pharmacist she worked in Alameda for two years. She then married her fellow student W. Bruce Philip and they opened a store in Fruitvale. In connection with this store they also maintain one at Dimond.

Mrs. May E. Birch graduated from the Women's and Childrens Hospital and followed the profession of nurse for six years. When she went into pharmacy with her husband in Orland, finding that a college education was necessary for her work she entered the pharmacy department of the Col-



Mrs. May E. Birch

lege of Physicians and Surgeons, graduating in 1904. At present Mrs. Birch manages the store of Birch & Co., Orland, California.

Miss Anna M. Farrell was born in Vacaville, Cal. She graduated from St. Gertrude's Academy, Rio Vista, after which she entered the California College of Pharmacy receiving the Ph.



Miss Anna M. Farrell

C. degree in 1908. For several years Miss Farrell has been engaged in Miller's Pharmacy at Vacaville, Cal.

WOMEN'S PHARMACEUTICAL ASSOCIATION

The regular monthly meeting was called to order by President Barbat-Winslow at the home of Mrs. Bruce Philip at Fruitvale, on May 31st. Some of the topics of discussion were: "Freshly Distilled Water for the Preparation of Salvarsan," "Boric Acid Solutions Made with Hot Water," etc. It was stated that boric acid solutions made from distilled water at ordinary room temperature were free from germs, whereas those made from boiled water soon become contaminated in some way. Attention was called to the article in Collier's Weekly on **Swamp Root**, showing the worthlessness of this nostrum. A copy of "The Great American Fraud" (Adams) is a good help and every pharmacist should have this book on his table. A letter was received from the Pacific Drug Review placing the Association on their mailing list. We are now receiving monthly complimentary copies of the

Pacific Pharmacist, Meyer Brother's Druggist, and the Pacific Drug Review.

Miss Nelson read a paper on "A Successful Window Display." Meeting adjourned to meet at the California College of Pharmacy, June 28th.

"At the hands of thief or murderer few of us suffer, even indirectly. But from the careless tongue of friend, the cruel tongue of enemy, who is free? No human being can live a life so true, so fair, so pure as to be beyond the reach of malice, or immune from the poisonous emanations of envy. The insidious attacks against one's reputation, the loathsome innuendoes, slurs, half-lies by which jealous mediocrity seeks to ruin its superiors, are like those insect parasites that kill the heart and life of a mighty oak. So cowardly is the method, so stealthy the shooting of the poisoned thorns, so insignificant the separate acts in their seeming, that one is not on guard against them. It is easier to dodge an elephant than a microbe."—William George Jordan, from the Journal of the American Pharmaceutical Association.

SEVEN WONDERS OF WORLD OF SCIENCE

Wireless Leads List Selected by Experts

The seven wonders of the world, as selected by the faculty, graduates and seniors of the Chemists' Seminary, have been announced by Professor L. M. Dennis. A few weeks ago one of the prominent scientific magazines sent a list to Cornell containing fifty-seven wonders of modern times and requested the chemical department to pick out seven of them as representing the greatest of modern human ingenuity. The seven which were selected, in the order of their importance, follow:

Wireless, synthetic chemistry, radium, antitoxins, aeroplanes, Panama Canal and the telephone.

A Successful Meeting

The fifteenth annual meeting of the American Medico-Pharmaceutical League, held at the Hotel Astor, New York City, on Monday evening, May 27th, 1912, was a genuine success.

The following papers were received by the corresponding secretary, Samuel F. Brothers, Ph.G., M. D., of Brooklyn, and were read at this meeting.

- 1—President's address.
- 2—Address of Vice-President.
- 3—Treasurer's Address—"The Woman Physician."
- 4—Address of Recording Secretary—"A Few Obstetrical Hints."
- 5—Address of the Chairman of the Executive Committee.
- 6—"Relation Between Physician and Pharmacist."
- 7—"Important Changes in the Coming Revision of the National Formulary."
- 8—"Different Methods of Advertising—Also, Suggestions for the Careful Pharmacist."
- 9—"Shorter hours in the Drug Store."
- 10—"The Legal Status of Diseased Mentality."
- 11—"Seven Years' Experimentation in the Cure of Cancer."
- 12—"A Heart Case, Illustrative of the Danger of Excessive Rope-Jumping."
- 13—"Electricity in Prosopalgia and Torticollis."
- 14—"Report of a Case of Toxaemia Following Pregnancy."
- 15—"Thou Shalt Not."
- 16—"Pulmonary Tuberculosis and Its Relation to Every-Day Habits."
- 17—"Colds Cured by Druggists, as Furthering Tuberculosis."
- 18—"Complications and Treatment of Trachoma."
- 19—"Inebriety—Its Cause and Treatment."
- 20—"The Penalties of the Strenuous Life."
- 21—"Physiology of the Mind."
- 22—"An Interesting Case of Cardiac Collapse."
- 23—"Chronic Purulent Otitis Media."
- 24—"Etiology and Diagnosis of Infantile Paralysis."
- 25—"The Vaccine Treatment of Gonorrheal Complications."
- 26—"Prevalence and Diagnosis of Acute Middle Ear Disease in Infants."
- 27—"Puerperal Sepsis."
- 28—"Effects Produced by Loss of Teeth, and Other Faulty Oral Conditions."
- 29—"A Good Method of Producing Local Anesthesia."
- 30—"What is the Relation Between Dentistry and Medicine."
- 31—"Christianism and Commercialism."
- 32—"Why American Pharmacy is Suffering the Loss of Public Confidence."
- 33—"The Pharmacist, His Brother's Keeper."

She Knew

The Brother—She's got lovable eyes, kissable lips, a huggable shape, and holdable hands.

His Sister—Yes, and she's got removable hair, adjustable hips, colorable brows, and a transferable complexion.

Teetotaler—You ought to be ashamed! I'll bet it's so long since you've tasted water you don't know what it is!

Gailey—Water? Water? Oh, yes. I remember. Isn't it the stuff they put under bridges?

COMPARE YOUR PRICE LISTS

A CAREFUL STUDY

*Prac-
tically
85%
Of
Lilly
Products
Are
Subject
To
Best
Discount
40%
Through
Your
Jobber*

*Study
The
Parts
Of
Other
Lists
Subject
To
"Best"
Dis-
counts*

of our price list will show you that a very large percentage of your pharmaceutical requirements are subject to 40 per cent. discount without contract obligation, through your jobber. Net prices to all retailers on articles in PART II., which is relatively small, are on the same net basis as commonly given by competitors to their preferred customers who are under contract to buy a given quantity direct within a specified time.

IN VIEW OF THESE FACTS

does it seem wise to obligate yourself to buy a large amount of pharmaceuticals direct from the manufacturer within a definite period when such low and liberal terms can be secured at any time through your jobber by specifying Lilly?

COMPARE PRICE LISTS

STUDY your past purchases and see if Lilly specifications through your jobber will not help you to keep better stock, lower your liabilities and give you more cash at the end of the year.

**YOUR JOBBER CARRIES THE
COMPLETE LILLY LINE :: ::**

ELI LILLY & CO.

INDIANAPOLIS
NEW YORK

CHICAGO
ST. LOUIS

KANSAS CITY
NEW ORLEANS



Personals and Trade Items

Nothing in a Name

Mr. Grouch was in an unusually bad humor because he had not been able to get home for his Christmas dinner. "Look here, waiter," said he, scowling deeply over his plate. "I ordered turtle soup. There isn't even a morsel of turtle flavor in this."

"Of course not," returned the waiter, "What do you expect? Shakespeare said there was nothing in a name. If you ordered cottage pudding would you expect a cottage in it? In Manhattan salads would you look for a Flatiron or Singer building? You can't expect to come in here and order a Christmas dinner for fifty cents and have a Christmas tree thrown in. Any tea, sir?"

American Medico-Pharmaceutical League

Sixteenth annual meeting, Monday, May 26, 1913. Members or non-members desiring to read papers at this convention are invited to forward the titles. Membership dues, \$2 per annum. All reputable physicians, dentists and pharmacists are eligible. Eugenie R. Eliscu, M. D., treasurer, New York City; Samuel F. Brothers, Ph. G., M. D., executive member and corresponding secretary, 96 New Jersey Avenue, Brooklyn, N. Y.

W. G. Brown has retired from the management of the International Drug Store, Oasis, Cal., and has been succeeded by **G. A. Hector** from Los Angeles.

G. C. Baker who purchased the Tropico pharmacy, Glendale, Cal., recently, is making many valuable improvements to his stock and fixtures. When completed this store will be the equal of its kind in the valley.

J. P. Holden and his son Arlett Holden, have purchased the G. L. Robbins Pharmacy at the corner of Main and Mill streets, Porterville, Cal., in the P. P. Davis block, the new owners having taken possession of the property and are in charge now.

Harry G. Kreppel, a graduate of the New York College of Pharmacy, has arrived in Prescott, Ariz., and will be associated with the Brisley Drug Company. He comes highly recommended from New York City.

Drug Stores (snaps) for sale and trade in 48 states. Also jobs. Established 1904. Strictly reliable. Gilt edge references. **F. V. Kniest, R. P., Omaha, Neb.**

For Sale and Exchange—We buy and sell Am. Drug Synd., Aseptic Products Co., Sanitol Chem. Co., Am. Drug Fire Ins. Co. stock. What have you for sale or in the market to buy? **C. S. Mather & Sons, 17 N. LaSalle Street, Chicago, Ill.**

Position Wanted—Woman pharmacist, licentiate registered in California, wants position in drug store. Address Pacific Pharmacist.

Dr. C. C. Haskell, of the Pharmacological Department of Eli Lilly & Company, was in attendance at the Atlantic City meeting of the American Medical Association.

Druggist Flach and family had a hairbreadth escape from serious injury and death, when in making a sudden turn on the road near Walnut Gulch, Tombstone, Ariz., his auto turned turtle, throwing the occupants out and badly wrecking the top, shield and parts of the machine. It was a most miraculous escape and fortunately all of the auto party escaped without a scratch. The auto is at King's garage undergoing repair while Flach is kept busy telling how it happened.

N. W. Long of Los Angeles, registered druggist, is now in the employ of the Rex-all Drug Co. Mr. Long is a good druggist, also a good soda mixer.

R. M. Green, pioneer druggist of Oroville, and prominent in State and National G. A. R. circles, has sold his drug store in this city and will retire from active life. **E. E. Slayton**, of San Francisco, will succeed Green in the drug business and will take charge June 10.

"Ah," says the Christmas guest, "how I wish I could sit down to a Christmas dinner with one of those turkeys we raised on the farm when I was a boy, as the central figure!"

"Well," says the host, "you never can tell. This may be one of them."

PRICE CHANGES

The fluctuations of the past month have not developed any material changes from last report. **Oil Bergamot** advanced \$1.25, due to speculative influence, **Lemon, Orange** and **Anise Seed** 15c, caused by scarcity, **Citronella** 2c, **Oils Peppermint** and **Santal** continue high. **Golden Seal Root** and **Larkspur Seed** each advanced 15c, and **Buchu Leaves** 25c. The high price of **Opium** and **Menthol** is maintained. **Cardamom Seeds** advanced 10c, with upward tendency. **Santonin** records a further advance of \$1.25 and a still higher figure is probable. **Sabadilla, Olibanum** and **Celery Seed** each advanced 5c. **Quince Seed** higher and good quality scarce. **Tahiti Beans** supply inadequate and marked up 50c. Small flake **Manna** and **Resin** held firm; **Nitrate Silver** advanced 1c per oz. **Chloroform** declined 3c. **Bedrock** now thought to have been reached. **Linseed Oil** declined 5c, **Turpentine** shows no change. **Lycopodium** declined 2c, **Glycerin** 1c, **Spanish Saffron** 25c, **Ipecac** 35c, **Balsam Tolu** and **Cantharides** each 5c. **Cod Liver Oil**, influenced by heavy returns from fisheries, \$3.00 per bbl. lower. **Soap Bark** and **Althea Root** show a higher tendency. **Wright's Smoke** now \$8.00, **Lacteol** \$13.00, **Bel-Bon Cream** advanced to \$4.00 and \$7.00 respectively, for the two sizes.—L. & M.

H. W. Armour, of the Armour Pharmacy, Pomona, Cal., is in Los Angeles superintending the packing of his household goods preparatory to moving to Pomona with his family.

Dr. G. W. Vickers and **H. B. Cate** bought out the interests of **Frank D. Lovett** of the Lovett Drug Company at the northwest corner of Washington Street and Central Avenue, Phoenix, Ariz. Mr. Lovett sells out on account of a much-needed rest, and will devote his time out doors looking after country and city property of which he is owner.

Articles of incorporation were filed yesterday by the **Johnson-Cassel Drug Company**. The incorporators are **G. D. Johnson, W. A. Cassel** and Attorney **Rusk P. Mossholder**. The company will engage in the drug business in San Diego.

The failure of **F. T. Reams**, druggist at the City and County Hospital, San Francisco, Cal., to join the local Retail Drug Clerks' Association, has resulted in his removal by a majority vote of the Board of Health.



Dorland and His Walrus

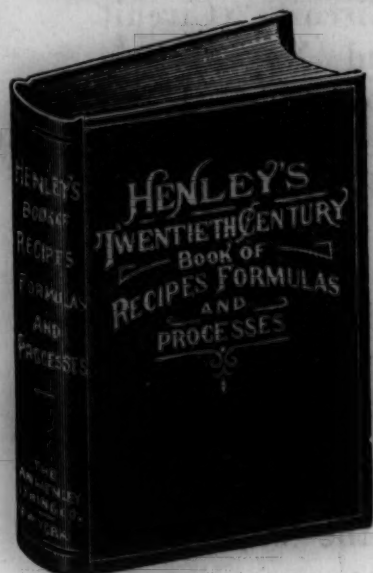
He looks happy, doesn't he? Well, he is. He is sole proprietor of one of the best-looking, most-convenient drugstores in the State of Illinois.

The store is unusually attractive. The finish of the fixtures and fountain is in a light gray oak, produced by aluminum bronze filling. The soda tables have tops of imported walrus glass of a light coffee color shade. The floor is of a rich sage green tile. On the whole, the store is most attractive.

The entire furnishings, including the special soda chairs and tables, electroliers, showcases, fountain, and all, were made by the **Walrus Manufacturing Company**, of Decatur, Illinois.

Mr. Dorland is one of the enterprising young druggists of the country, a hustler, a merchant who is up and coming all the time. He is second vice-president of the Illinois Retail Druggists' Association.

His new store, located at Springfield, Illinois, will be the unofficial headquarters of the association when they meet in that city next summer.

RECIPES, FORMULAS AND PROCESSES

Contains over 10,000 chemical, technological and practical recipes, including hundreds of so-called trade secrets for every business.

Cloth, \$3.00

Half Morocco, \$4.00

Address the
Pacific Pharmacist

Sylvester's Haarlem Oil

For 200 Years
standard remedy of the world for
**KIDNEY DISEASES,
BLADDER TROUBLE,
GRAVEL and all
INWARD
INFLAMMATION.**

WE ARE EXCLUSIVE AGENTS

for the U. S. and Canada for the importation of

GENUINE SYLVESTER'S HAARLEM OIL

FROM HAARLEM, HOLLAND

None Other is Genuine. Look for "C. SYLVESTER"
on the label

M. COWARD, Successor to C. Sylvester
Depot, No. 270 Greenwich Street, **New York**

Scientific Pharmacy

Burroughs Wellcome & Co's. exhibits at the A. M. A. meeting in Atlantic City this year (Exposition Building, Boardwalk and Kentucky Avenue) make the right kind of a show. The Southern Pharmacist should make a note of "Soamin," the arylarsonate with which the best results are now being obtained in Pellagra, the scourge of the maize area. "Tabloid" Thyroid Gland and "Tabloid" Thymus Gland are already well-known on this side.

"Tabloid" Pituitary Gland has recently given some remarkable results in the hands of German experimenters. The firm's display is worthy of the high standards on which they base their reputation. "Wellcome" Brand Sera and Vaccines make other notable additions to modern pharmacy, and should attract those with a scientific bent.

"Why, man, you have no sense of humor. When I first heard that joke I laughed till my sides ached."

"So did I."

Searby Bed Pan

has been used by thousands of patients under directions from hundreds of physicians, including many of the most eminent men of the Pacific Coast

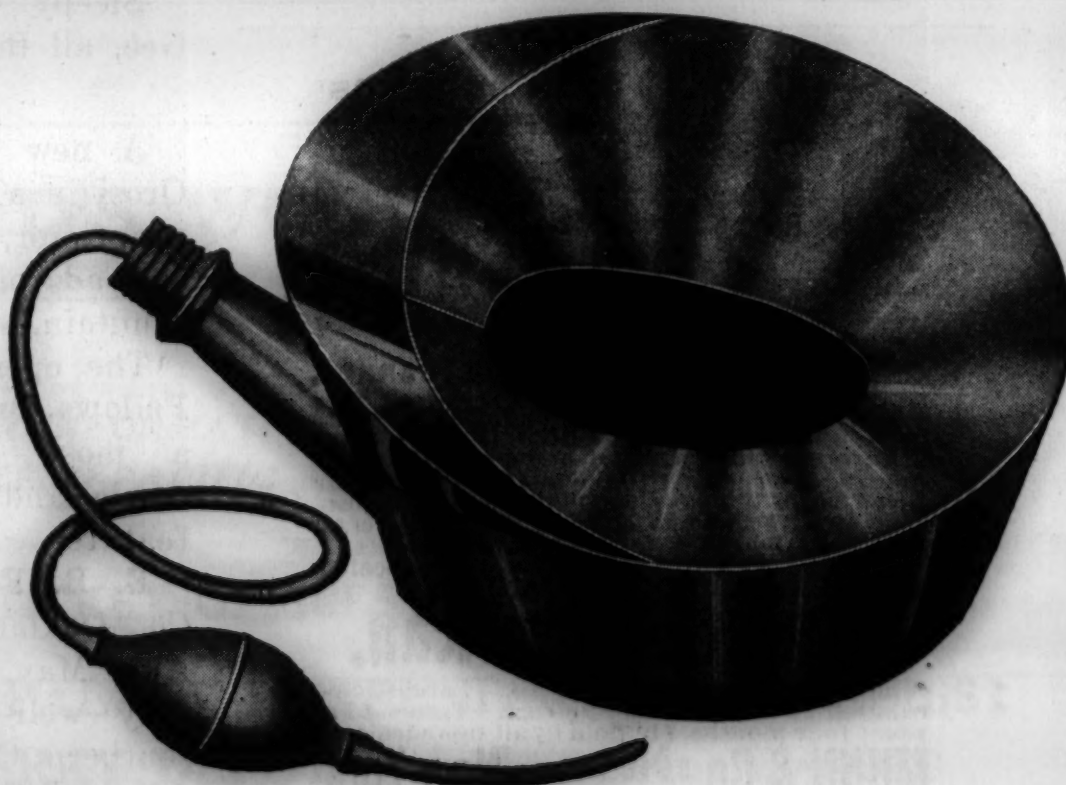
It is a common-sense vessel that fits the body comfortably, and permits of the use of hot water douches while the patient is completely covered, thus securing the full benefit of the warmth in stimulating the circulation and relieving congestion.

Ordinarily it is used without the outflow tube shown in the cut, but when copious vaginal douches are needed, a gallon or more of hot water being employed, the "Outflow Attachment" is put on. This, acting as a syphon, carries off the water as it flows into the pan, and is then automatic so long as the water runs into the pan.

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SAN FRANCISCO

Langley & Michaels Co. have once more set the pace for low price on Peroxide of Hydrogen in their Red Star brand, advertisement of which will be found on page two of this issue of the **Pharmacist**. Though the price has been recently reduced we are assured this is not done at the expense of quality, and that the article is absolutely dependable and strictly U. S. P. Although the manufacturing plant was lately enlarged, we are informed its capacity is now being severely taxed by the greatly increased demand for the "L. & M." product.

A. M. Harner, the live druggist of the live little town of Tempe, Ariz., was in Mesa recently shaking hands with many old friends.

It was announced yesterday that there had been a change in the management of the **Bangs-Wray Drug Co.**, at Fifth and D streets, San Diego, Cal. F. W. Bangs has retired from the firm and A. T. Johnson, formerly resident representative of the Western Wholesale Drug Co., has purchased an interest. D. D. Wray still retains his interest in the business.

C. W. Major became owner of a drug business in Enid, Okla. Mr. Major traded part of his fine fruit farm in West Hagerman, Roswell, New Mexico, for the Oklahoma property.

Leslie E. Gillim, pharmacist for the Southern Pacific company, suffered an attack of heart failure Monday afternoon in the company's drugroom of the Flood building and died half an hour later. Gillim had been in the employ of the Southern Pacific company seven years. A wife, Mrs. Edna Gates Gillim, and 3 year old twin sons survive him.

The Adrenalin Patents Sustained

The United States Circuit Court of Appeals for the Second Circuit (Circuit Judges Lacombe, Ward and Noyes) has affirmed the two decrees of Judge Hand of the Circuit Court for the Southern District of New York (189 F. R. 95) sustaining Takamine's patents Nos. 730176 and 753177, covering Adrenalin and Adrenalin Solution. The opinion, written by Chief Justice Lacombe, seems to give the claims of both patents such a broad interpretation as to cover any product possessing the indicated characteristics obtained in any way from the suprarenal glands, and leaves open the question, as not necessarily in issue in this case, whether the synthetic product would infringe or not, although the reasonable inference is that the court would have held an affirmative opinion on this point had the question been involved.

The Adrenalin and Adrenalin Solution protected by the Takamine patents are manufactured exclusively by Parke, Davis & Co. The litigation was instituted primarily to settle the question, raised semi-officially, as to who was entitled to the credit of first successfully isolating the active principle of the suprarenal gland, and the result is a complete vindication of Dr. Takamine's claim.

The few druggists who have handled competing products, as well as the manufacturers of such products, will doubtless cheerfully respect the decision.

Physics Prof. (after a long-winded proof): And now, gentlemen, we get X equals 0.

Sleepy Voice (from rear of room).—Gee, all that work for nothing!

A new drug store is to be opened in Oroquieta in a few weeks. **John L. Klika**, the proprietor, informs us that he has three carloads of goods coming, including a soda fountain, which is one of the finest.

The opening of the soda season at the **Fellows Drug Store**, Bakersfield, Cal., was a most auspicious affair. Vaudeville, music and souvenirs were the prominent features.

E. B. Root, of the National Pharmacy Co., Oakland, was doing business in Santa Ana, May 27. "Elecampane Burdock" is very well known to the drug trade of southern California as one of the jolliest fellows who ever carried a grip.

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Open to graduates and others who are properly qualified. The course is intended to prepare the candidate sufficiently to make chemical and microscopical examinations of drugs, drug products and foods in compliance with the Federal and State pure food and drug laws. Drug assaying and other chemical work, the microscopical examination of drugs, spices and food products, and the bacteriological testing of pharmaceutical preparations, water, milk, etc., are among the subjects taught. Those who complete the course are qualified to do work in food and drug laboratories.

The next course will begin September 11, 1912, and end April 30, 1913.

For further information, address FRANK T. GREEN, Dean.

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The **Walrus Fountain** which was recently installed by Langley & Michaels Co. in the new Norton confectionery at Fresno is exciting much favorable comment. No expense has been spared in the furnishings and interior decoration of this establishment. Unique designing, mahogany fixtures and furniture, coupled with perfect service will doubtless make this the most popular establishment of its kind in Fresno. The fountain, which is without question the handsomest one in the interior, is an 18-foot Walrus of the latest type and an unusually elegant combination of highly polished Honduras mahogany and imported marble. The back bar is of the same material, with beautifully designed high color art glass effects, the whole making a strikingly attractive fixture.

A Highland minister, who was rather a pompous gentleman, came to a shepherd's house to baptize a child.

"Are you prepared?" he asked the fond parent.

"Ou ay, munnister; I have a grand ham for tea."

"I mean spiritually prepared," thundered the cleric.

"Af coorse I am, oh, yes. I got twa bottles o' first-class whiskey from the inn," replied the imperturbable Celt.

The **American Association of Pharmaceutical Chemists** convened in Indianapolis June 3, 4, and 5. One of the events of the meeting was a visit to the scientific laboratories and the capsule factory of Eli Lilly & Company.

For Sale and Exchange—We buy and sell Am. Drug Synd., Aseptic Products Co., Sanitol Chem. Co., Am. Drug Fire Ins. Co. stock. What have you for sale or in the market to buy? C. S. Mather & Sons, 17 N. LaSalle Street, Chicago, Ill.

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Wisdom is cherished by the few, neglected by the many, and hired by the powerful.

Work will be commenced within a few weeks razing the old building on the corner of First and East G Street, Benicia, now occupied by the Western Union Telegraph Company and the office of A. Dalton & Son to make way for the erection of a handsome new building which will be occupied by Frank Hoffman as a drug store.

Let's Put More GINGER into the Confectionery Business

Mr. Dealer! The "nimble sixpence" beats the "slow dollar"—everywhere and every time. Which, being freely translated, means—a lively business pays better than a dead one. **LET'S GINGER UP!** Let's push **NECCO SWEETS**—a line of more than 500 varieties of the purest, most attractive and delicious confections made today.



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Mr. Ralph R. Zane, Western General representative for Eli Lilly & Company, has recently returned to his office in San Francisco after a month's trip to the Hawaiian Islands.

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